

THE RAILWAY GAZETTE

A Journal of Management, Engineering and Operation
INCORPORATING

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GOODS FOR EXPORT

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this paper should not be taken as indicating that they are available for export

NOTICE TO SUBSCRIBERS

Consequent on paper rationing, new subscribers in Great Britain cannot be accepted until further notice. Any applications will be put on a waiting list, and will be dealt with in rotation in replacement of subscribers who do not renew their subscriptions. Orders for overseas destinations can now be accepted

POSTING "THE RAILWAY GAZETTE" OVERSEAS

We would remind our readers that there are many overseas countries to which it is not permissible for private individuals to send printed journals and newspapers. THE RAILWAY GAZETTE possesses the necessary permit and facilities for such dispatch.

We would emphasise that copies addressed to places in Great Britain should not be re-directed to places overseas

TO CALLERS AND TELEPHONERS

Until further notice our office hours are: Mondays to Fridays 9.30 a.m. till 5.30 p.m.

The office is closed on Saturdays

ANSWERS TO ENQUIRIES

By reason of staff shortage due to enlistment, we regret that it is no longer possible for us to answer enquiries involving research, or to supply dates when articles appeared in back numbers, either by telephone or by letter

ERRORS, PAPER, AND PRINTING

Owing to shortage of staff and altered printing arrangements due to the war, and less time available for proof reading, we ask our readers' indulgence for typographical and other errors they may observe from time to time, also for poorer paper and printing compared with pre-war standards

Sir Charles Hambro on Post-War Railway Policy

AT the annual meeting of the Great Western Railway Company, Sir Charles Hambro, who is retiring from the Chairmanship this month, and is succeeded in that office by Lord Portal, after giving stockholders an interesting insight into some of the many problems with which the railways have had to contend during the war, turned to post-war policy. He made it clear that the widespread plans for improvements which the railways have in view, are based on the supposition that the main-line railways would continue as four separate entities and that co-ordination of all forms of internal transport should be effected so as to secure to users, as far as practicable, a free choice of alternative facilities, with competition on a fair basis. He was hopeful of reaching early agreement with private owners and wagon repairers on the best means of securing a greater measure of common user of wagons in the coal industry, and also of extending the use of high-capacity wagons. Because of the increase in the cost of salaries, wages and materials, which before the war constituted nearly 90 per cent. of the total expenditure of the country, he considered that it would be necessary to raise the pre-war level of charges by about 50 per cent. If this were done, it would cover the rise in costs and still yield only the pre-war net revenue.

Colonel E. Gore Browne on Railway Air Plans

At the annual meeting of the Southern Railway Company, the Chairman, Colonel Eric Gore Browne, in one of the most statesmanlike of the railway speeches, emphasised the importance his board attached to air transport, and pointed out that the railways by their long experience in cross-channel services, by their extensive international trade connections, and by their operation of air services before and during the war, were in a special position to make an effective contribution to the future of British civil aviation. Negotiations with the Government on points of principle had been concluded and the results would be embodied in a white paper dealing with Government policy which would be presented soon. The railways hoped to have a substantial share in European and internal air services. The railways were in the transport business in all its forms; their aim would be to see that the public had the most efficient service possible by rail, road, sea and air. He also paid tribute to the results which had been achieved under a system of private enterprise and said that it was sometimes said that private enterprise, if it was to survive, would have to make still further contributions to the new world to which many were looking. He and his colleagues were fully prepared to accept this invitation.

Mersey Railway Company

The net revenue of the Mersey Railway Company for the year 1944, after giving effect to the estimated operation of the financial arrangements with H.M. Government in respect of the control of the undertakings of railway companies and the L.P.T.B., is again £109,976. The balance brought forward from the previous year's account is £3,598 (£3,483), and, after appropriation to contingency fund of £800 (£704), a sum of £112,774 (£112,755) is available for distribution. Interest on debenture stocks absorbs a total of £56,143; dividend on the 3 per cent. perpetual preference stock, £19,472; and dividend on the consolidated ordinary stock, at the rate of 2½ per cent. per annum, £33,542; leaving a balance to be carried forward of £3,617. The dividend of 2½ per cent. for the year on the £1,412,263 of ordinary stock repeats the distribution for 1943. Before the war the best ordinary dividend was the 1½ per cent. paid for the year 1938. Subsequent dividends have been 1½ per cent. for 1939, 1½ per cent. for 1940, 2 per cent. for 1941, and 2½ per cent. for 1942, 1943, and 1944. As in previous years, no specific provision has been made in the accounts for war damage contributions. A report of the annual meeting is given on another page.

Londonderry & Lough Swilly Railway

The Londonderry & Lough Swilly Railway is paying 2 per cent. on its ordinary share capital for 1944, after payments of 1 per cent. for each of the years 1942 and 1943. It involves only a small amount but is significant in that it has been made possible by a revival in rail traffic on a system which for many years previously had been almost entirely dependent on road transport for its revenue. Before the last war the company was paying a steady 7 per cent., but rising costs and road competition brought the distribution down to 3½ per cent. for 1922, and to nil for the years 1923 to 1941 inclusive. At one time the total mileage operated was 99½ miles on the 3-ft. gauge, but this has now been reduced to 52½ miles by the closing of unprofitable lines. Railway receipts in 1944 were £54,219, an increase of £2,397 in comparison with 1943, but the railway expenditure of £53,797 showed an increase of £3,903 mainly because of the advance in locomotive fuel costs. There was little change in the

train-mileage run, but the percentage of railway traffic expenditure to railway traffic receipts rose from 95.83 to 98.87. Total receipts from railway passengers amounted to £24,059, an increase of £656, and there was again some first class travel which brought in £3,301, an increase of £315. Goods train traffic receipts amounted to £27,057, an increase of £1,542; a decrease in livestock receipts was more than offset by a rise under "other minerals." Road transport net receipts of £11,408 were £5,649 lower, notwithstanding a substantial advance in gross earnings.

Overseas Railway Traffic

Argentine railway traffics continue to show improvement in their gross traffic receipts. Apart from the operations of the main undertakings, which are summarised in the table below, the Entre Rios now has a total increase of £139,193 at £925,093 for the 35 weeks of the year to date, and the Argentine North Eastern at £692,873 shows an advance of £124,600. On the Antofagasta (Chili) & Bolivia Railway the aggregate receipts since January 1, £280,700, are £12,800 more than for the like period a year earlier, and on the Leopoldina Railway the gross receipts at £409,246 are better by £20,126.

	No. of week	Weekly traffics	Inc. or dec.	Aggregate traffic	Inc or dec.
		£	£	£	£
Buenos Ayres & Pacific*	35th	171,600	+31,534	4,921,934	+876,334
Buenos Ayres Great Southern*	35th	279,466	+33,600	7,674,666	+636,933
Buenos Ayres Western*	35th	70,200	+3,800	2,638,266	+456,066
Central Argentine*	35th	213,733	+15,267	6,744,050	+890,810
Canadian Pacific	9th	1,115,200	-29,600	10,565,000	-125,400

* Pesos converted at 15 to £

The Central Uruguay Railway shows a decline of £25,541 in its receipts of £1,183,744.

British Railway Investments in Cuba

At one time British financial interests in Cuba were considerable, and substantial returns were paid on it. This was especially the case with the ordinary capital of the United Railways of Havana, but whereas in 1913 British investments amounted to £44,444,618 and earned a return of 4.8 per cent., according to statistics compiled by *The South American Journal*, in 1944 they had shrunk to £27,425,885 and the yield was no more than 0.7 per cent. Moreover, although in 1913 the amount receiving no interest was but £2,000,000, last year it was as much as £22,602,383. The bulk of British interests in Cuba is now concerned with railways, and almost entirely with the United Railways of Havana, which at one time paid dividends of 7 per cent. and 8 per cent., and often showed profits which would have permitted distributions twice as great. Increased working costs, and a decline in demand for Cuban cane sugar, have seriously affected the prosperity of the railways, and last year the investments of £26,174,645 received in interest only £82,373 or 0.3 per cent.

Railway Apprenticeship in East Africa

The attractions of a railway career are appealing increasingly to youths in East Africa and vacancies in the Mechanical Engineering Apprenticeship Scheme run by the Kenya & Uganda Railways & Harbours Administration are keenly sought. The scheme is open to European, Asian and African youths. The scheme for Africans is the largest, with about 100 boys training at a time. They live in a hostel, and receive a small but annually increasing wage, plus clothing allowance. The apprenticeship period is five years and the youth is trained as a fitter, turner, blacksmith, painter, moulder, carpenter, or tinsmith. The training scheme for Asians is similar, but the boys live with their families or friends during their training. In the European section, provision is made for 21 youths to serve a five-years' apprenticeship, at the end of which time they can, if they pass out successfully, be employed by the railway as artisans at £240 a year and later as Supervisors and Foremen. This salary is supplemented by free housing or an allowance in lieu, and the usual railway privileges such as home leave, free passage, and superannuation fund. The apprentices are taught a definite trade and also receive tuition in the theory of engineering and may qualify for a bursary for further training in England.

"The Ocean Limited" on War Service

More than half a million passengers travelled on "The Ocean Limited" of the Canadian National Railways between Montreal and Halifax during the year 1944. Mr. J. T. Whiteford, Manager of the C.N.R. Passenger Service Bureau, has estimated that about 55 per cent. of the 524,140 persons conveyed either eastbound or westbound on this train were members of the Armed Forces. A large percentage of the remainder of these passengers may be classified as being on business directly associated with the war effort. "The Ocean Limited," which is

known as No. 3 westbound and No. 4 eastbound, was the only Canadian National train to operate daily in two sections, both eastbound and westbound, during every day of 1944. The first section of the train was often made up entirely of sleeping cars. "The Ocean Limited," over its 840-mile route, also handled an enormous quantity of mail and express traffic. The C.N.R. operates two other daily trains between Montreal and Halifax, namely, "The Maritime Express" and "The Scotian." Extra trains were also operated between these two cities for military personnel. The total carryings of all Canadian National Montreal-Halifax trains for 1944 exceeded 1,000,000 passengers.

One-Class Long-Distance Trains

A marked trend in modern passenger travel in the United States, particularly on long journeys involving nights in the train, is from Pullman accommodation to "coaches," the equivalent of British third class. In this change there is no doubt that the modern reclining chair car has played the major part, and various railways have popularised these cars to an even greater degree by assembling them into complete "all-coach" trains, scheduled at speeds but little, if at all, inferior to those of the fastest all-Pullman services. For example, the Santa Fe has its all-coach diesel streamliner "El Capitan," booked at precisely the same speed as the Pullman "Super-Chief" between Chicago and Los Angeles. The "El Capitan" and other all-coach trains have their own dining cars and refreshment lounges, and at night the chairs can be tilted to provide comfortable sleeping accommodation. Questionnaires leave no doubt as to the reactions of the American public to these facilities. Typical opinions, quoted in a recent issue of the *Railway Age*, are that "everybody shares facilities alike and has the same privileges"; "equipment should either be all-coach or all-Pullman"; "passengers are more friendly on a one-class train"; "service is much better for coach passengers on a one-class train"; and even such revolutionary sentiments as that "differentiation between coach and Pullman passengers is not democratic" and "class distinction on the same train in America is bad taste." Indeed, the one-class train was strongly preferred by 92 per cent. of the passengers questioned.

Damaging Rails by Careless Handling

The susceptibility of high-carbon steel to damage by mishandling is not always fully realised; nor that this increases considerably as temperature falls. Suspecting that certain web failures of rails may have been due to their having been struck, during cold weather, by the heavy hand hammers used for spike-driving, the research staff of the Association of American Railroads has been conducting experiments. A number of 5-ft. lengths of 112-lb. and 131-lb. flat-bottom rail was kept for several days at a temperature of about 20 deg. below zero, and subsequently the web of each rail was struck a heavy blow with one of these hammers. The temperature at the time of the test had been allowed to rise in varying degrees. As a result, it was found that of 14 lengths of 112-lb. rail struck at temperatures between -13 deg. and +19 deg., 10 had developed web cracks; at 21 deg. and upwards there were no cracks. Of five 131-lb. rails, only one developed a crack in the web. A second series of tests, in similar conditions, except that a greater variety of sections was tested, showed that if the first hammer blow did not cause failure, a second blow, or more than two, ultimately caused a crack to form, in almost every case. These experiments are being used to impress on all concerned in the handling and laying of rails that they cannot be too careful in avoiding damage to the rails through careless use of tools.

Hornstays for Coupled Wheels

The provision of increased motive power inevitably means increased bearing areas for the coupled axles; larger journals need larger axleboxes; and to preserve a due proportion between journal length and diameter, it is obvious that, in common with these other increases, the journal length (and hence the axlebox width) likewise must be augmented. This in turn decides the proportions of the hornstays, if they are to be of the conventional pattern which has found such time-honoured acceptance in this country. On some railways abroad, however, the hornstay is used simply to brace the frameplates themselves, and not the hornblocks in addition. It has been argued that with the latter arrangement, the hornstays, being simply fastened to the lower edges of the frameplates, are more in the line of the direct stresses; whereas if the hornstays are connected to the hornblocks, any stresses in the frameplates will be transmitted through the hornblock bolts (or rivets), producing in the latter shear stresses which are much better avoided if possible. Nevertheless, particularly where wedges are used instead of parallel hornblocks, the conventional hornstay is undoubtedly well established. One way out of the difficulty, so far as coupled wheels are concerned, would be to fit both kinds for each axlebox; that

is, one hornstay fitted across the frame gaps, plus an additional hornstay fitted across the bottom of the hornblocks. We believe this was tried on the Indian State Railways about December, 1937.

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American Locomotive Appetite

With the unceasing increase in the size and power of steam locomotives in North America, the problem of keeping them adequately supplied becomes increasingly great. It is conservatively estimated that modern United States passenger locomotives use, on the average, 100 gal. of water a mile and freight locomotives 200 gal., with the result that runs of 100 miles require 10,000 to 20,000 gal., weighing 40 to 80 tons, with at least 3,000 gal. in reserve. Coal consumption averages at from 10 to 20 miles of movement, and as far as possible the modern tenders, carried on a minimum of 12 wheels, and, in the latest designs, on 14 and 16 wheels, are designed to carry sufficient fuel for runs of 500 miles or so without replenishment. Where water is taken from columns, the general aim on main lines in the United States is to deliver it at a rate of at least 4,000 gal. a min., and some railways have columns capable of delivering 5,500 gal. a min. It need hardly be added that considerable care is needed in the design of watering facilities on this scale, so that they may be easily handled by the enginemen, and that the pressure of the water may not cause the spout to kick out of the tender tank. Where coaling facilities are installed across running lines, similar attention has been paid to expeditious delivery, so that train delays and line obstruction may be reduced to a minimum: certain modern plants on the New York Central can deliver 40 tons of coal to a tender in 75 sec.

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Railways and Government Air Offer

THE railways have accepted the Government offer to participate in the new European air company. They have welcomed the opportunity of associating themselves with partners all of whom can contribute from their experience and organisation to the success and efficiency of British civil aviation. Last October the railways gave the Government their rail-air plan for the formation of a new company to include short-sea shipping lines and independent air operators, as well as themselves, for purposes of operating a comprehensive network of air services in the United Kingdom and to Europe. The White Paper issued this week agrees with the view of the railways that in the interests of economy and efficiency internal air services and services to the Continent should be operated by the same organisation. For this purpose the Government proposes the formation of a company to include the B.O.A.C., the railways, short-sea shipping lines, independent air operators, and travel agencies.

The reasons given in the White Paper for the inclusion of the railways in the new company are almost identical with those on which the railways based their claim to participate in any such scheme. They are (1) the experience of the railways in transportation problems by rail, road, sea and air; (2) the experience of the railways in transport to the Continent; (3) the benefit to the new company of the use of the railways' travel organisation; (4) the advantages of the co-ordination of air with surface travel; (5) the proved efficiency of the railways as air operators.

The White Paper makes it clear that although the Minister will have general control over broad aviation policy, the management of the company will be entirely in its own hands, so that it can be conducted on strictly commercial lines, and that in the provision of aircraft the company will have complete freedom to choose the types it considers most suitable, provided they are of British construction. The railways have never deviated from their intention to fly British aircraft, except that immediately after the war there may be a short period in which suitable British aircraft are not available.

The railways had not in their own plan asked for the exclusive right to operate. They realised, however, that few of the services were likely to be sufficiently profitable to justify competition for some time to come and that many services would be needed in the public interest which would probably make losses, but could be balanced by the more profitable routes. In any case there will be no lack of competition in the European services, in which the new company will have to compete against the air lines of other countries, while the users of air transport on internal routes will be safeguarded by an impartial tribunal.

The railways welcome the provision in the White Paper for the formation of subsidiary companies which will give full scope for the individual initiative and enterprise of those independent operators which had regular internal services before the war.

Railways' Air Plan

IN view of the imminent publication of the Government's White Paper on civil aviation, the railway companies last week gave particulars of their comprehensive plan for air transport which they submitted to the Government in October last, in accordance with the promise made by Lord Kennet in the House of Lords on May 11, 1944. A summary of the plan was published in our issue of October 20, 1944, but in view of the interest which their announcement has aroused, we reiterate its main features.

The railways propose to form a new company with an initial capital of £5,000,000 to be subscribed by the interests concerned, for the purpose of operating a comprehensive network of trunk and subsidiary air services throughout the United Kingdom, and to Eire, Northern Ireland and the Continent of Europe. They propose to embrace within the new company their existing air interests, including those in charter companies, and to offer partnership (a) to other air operators who provided regular services in this country before the war and (b) those shipping lines which operated in the areas concerned regular pre-war services conveying traffic for which air transport may be needed in future. Incidentally, it may be remarked that all the nine short-sea steamship companies concerned have agreed to participate. They propose to run air services to over 100 places on the Continent and 19 Continental routes which will include such places as Paris, Brussels, Marseilles, Rome, Lisbon, Berlin, Moscow, Istanbul, Helsinki, Athens and Iceland, together with about 34 internal routes within the British Isles, including Glasgow and Dublin. This will necessitate the operation of 20 million miles at the outset, and the mileage will rise progressively as the frequencies of services are increased and new routes developed.

The railways propose to operate these services without subsidy, assuming that neither subsidies nor special advantages will be given to other air services, including foreign air lines entering this country on a reciprocal basis. They propose to use British aircraft of suitable types immediately they are available but because of the impossibility of securing such machines at present, it is possible that they may have to use American "Dakota" machines for the next year or so. They propose to employ operating, commercial and technical staffs of the highest standing and experience in air transport to set up and manage the organisation necessary to carry out the plan. The new company will have its own repair organisation for the overhaul and major repair of aircraft, engines and accessories, but will not engage in aircraft construction.

The plan, it will be seen, is most comprehensive with great possibilities, but obviously it will require a considerable time to become fully effective. As to the qualifications of the railways to put forward such far-reaching proposals, there can be no question. The statutory powers given them by Parliament in 1928 have been used, not for coercion, but for co-operation with other internal air operators in Great Britain, and at the outbreak of war rail-associated companies were operating about 80 per cent. of the total route mileage licensed for operation by all internal air lines. On the outbreak of war the aircraft owned by Railway Air Services Limited and certain railway-associated air companies, were requisitioned for national purposes. Since then, by agreement with the Air Ministry, they have flown more than 7,000,000 miles, carried over 300,000 passengers without loss of life except on one occasion from enemy action, more than 7,000,000 lb. of urgent mail and cargo, and maintained a regularity of service of over 95 per cent. over difficult sea crossings during winter and summer. In 1938 a Government Committee of inquiry into civil aviation, under the chairmanship of Lord Cadman, reported that the railways were making a useful contribution to civil air development and had provided capital and experience in a proper and constructive manner, under their statutory powers.

The British railways' justification for putting forward the plan is that they have long ceased to be carriers by rail alone. They have become transportation companies, affording the public co-ordinated transport by rail, sea, road and air. They own 130 steamers, train ferries, etc., which convey annually to the Continent, Northern Ireland and Eire over 5 million passengers, 2½ million tons of cargo and 2½ million mail receptacles. They have thus greater experience of Continental traffic than any other transport undertaking in Great Britain and their ownership of the world-famous business of Thos. Cook & Son Ltd. gives them a further invaluable connection with Continental business. As the result of their experience of developing internal air lines, the railways are convinced that under post-war conditions, internal operations in

Great Britain cannot be conducted most efficiently and economically as a separate entity, but must become part of a much wider sphere of operations so as to secure the maximum number of flying hours a year from each aircraft.

The railways and those associated with them regard air transport as a primary service and not as an auxiliary to rail and steamer facilities. They therefore propose to develop their air routes irrespective of the effect such development might have on their surface interests. By the time this editorial is published the Government's White Paper should have been issued and it will be interesting to see to what extent the Government has accepted these most comprehensive proposals.

London Passenger Transport Board

THE eleventh annual report and accounts of the London Passenger Transport Board, prepared in the familiar wartime abbreviated form with statistics and details of working expenses omitted under the authority of the Ministry of War Transport, have just been issued. They cover the year ended December 31, 1944, and show that the net revenue of the board for that year, after giving effect to the estimated operation of the financial arrangements with H.M. Government in respect of the control of the undertakings of railway companies and the board, is £4,662,236. This amount consists of the fixed annual sum of £4,835,705 receivable under the terms of the Railway Control Agreement, reduced by the net saving in interest charges of £179,066 which resulted from the redemption of the London Transport 4½ per cent. T.F.A. Stock 1942/72 (which saving, in accordance with Article 4 of the Agreement, accrues to the Government during the period of control, and increased by £5,597 representing the board's proportion of a further estimated adjustment of the Government Control Pool for the year 1940. An amount of £11,050 has also been brought in from the London Transport "C" Stock Interest Fund, consisting of £10,688 transferred to the Fund out of the revenue for the year 1943, and £362, representing interest earned and profits realised during 1944 on the investments of the Fund. The total sum available for appropriation therefore becomes £4,673,286.

Payment of interest upon the prior charge stocks of the board requires £3,901,381, leaving £771,905 for the service of "C" Stock. A payment on account of interest on "C" Stock was made on August 25, 1944, at the rate of 1½ per cent.; this required £321,235. The balance of £450,670 is sufficient to permit of a final payment of 1½ per cent. on "C" Stock, making a total distribution of 3 per cent. for the year. The final payment requires £449,729, leaving an undistributed balance of £941. This sum, being less than one-eighth of one per cent. on the "C" Stock, has been transferred to the London Transport "C" Stock Interest Fund and is available for future interest.

The net revenue of £4,673,286 available for appropriation in the accounts is £73,994 less than the £4,747,280 which was available in the previous year. Three factors account for this reduction, namely: the amount received in respect of an estimated adjustment of the Government Control Pool for the year 1940 is less by £51,890; the amount brought in from the London Transport "C" Stock Interest Fund is smaller by £21,144; and the net revenue for 1943 included a profit on the realisation of investments (with no counterpart in the accounts for 1944) of £960. These same factors account for the decrease from 3½ per cent. to 3 per cent. in the rate of interest paid on "C" Stock. The London Passenger Transport Act, 1933, and the Stock Regulations made thereunder, require the board to make contributions out of revenue to Redemption Fund Accounts for the ultimate redemption of all the London Transport stocks, other than "C" Stock, within 90 years from the date on which the stocks were issued, but no contributions were to be made during the first 10 years from the date of issue. This 10-year period expired, as regards practically the whole of such stocks, on June 30, 1943. No sums have been set aside, as the contributions can be made only out of any net revenue which remains after interest has been paid on "C" Stock, in any year, at the standard rate of 5½ per cent.

The maintenance allowance which the board receives under the terms of the Railway Control Agreement has been applied in the board's accounts in meeting expenditure incurred during the year upon repairs and in setting aside provisions of £2,720,000 and £75,000 to the renewal and maintenance reserves respectively; the balance of the allowance, being the sum not so far applied in meeting repair expenditure or appropriation to reserves, has been included in the Balance Sheet (Account No. 9)

under the heading "Other Liabilities—Miscellaneous Accounts." The moneys received in respect of this maintenance allowance and not yet spent upon repairs or renewals have been paid into a trust fund, set up under the Railway Control Agreement, pending the conclusion of control. The payments to the trust fund up to December 31, 1944, totalled £24,945,074, including £123,095 on account of Joint Lines, and this sum is shown in the balance sheet among the assets of the board. Out of the trust fund, the Trustees have loaned £2,600,000 to the board for the general purposes of the undertaking. The position of the board's assets as regards abnormal wear and tear during the war period is not, in all respects, the same as that of the main-line railway companies, but the Minister of War Transport has agreed that, if and so far as it can be shown that the board's undertaking is similarly affected, the board will receive similar treatment. The legislation in respect of war damage to Public Utility Undertakings foreshadowed in the White Paper (Cmd. 6403) has not yet been introduced. No provision for the ultimate liability of the board for War Damage Contributions has been made in the accounts.

Railways and Post-War London Area Planning

DURING 1944 the reviews by the London Passenger Transport Board, in conjunction with the main-line railway companies, of (a) the immediate post-war requirements in the London Passenger Transport Area with particular regard to the suspended works included in the New Works Programme, 1935-40; and (b) the transport aspects of schemes for town and country planning and industrial and housing development within the area formulated by various authorities and other bodies, have continued and have embraced the County of London and other Plans. The board and the main-line railway companies recognise the need for proceeding with the outstanding works under the New Works programme, 1935-40, as soon as circumstances permit after the war, and the need, in regard to town and country planning and industrial and housing schemes, for close consultation between the planning authorities and the transport undertakings. Since the issue of the London Transport annual report for 1943, the Government has set up a Railway (London Plan) Committee under the following terms of reference: "To investigate and report upon the technical and operational aspects of those suggestions made in the County of London Plan of 1943 which relate to the main-line and suburban railway system of London, both surface and underground, bearing in mind that these suggestions are intended to contribute towards, and form part of, a comprehensive scheme for the re-development of the area in question." This committee is instructed to include in its examination of the problem any alternatives to or modification of the suggestions made in the Plan which the main-line railway companies or the London Passenger Transport Board may wish to submit, and is directed to have due regard to the requirements of traffic and to the convenience of the travelling public, and to any schemes of improvements which the railway companies and the London Transport may have in mind. The Standing Joint Committee of the main-line railway companies and London Transport has already supplied information to this committee.

Railway Transport in Soviet Russia

BY reason of the vast extent of its territories, and the great range of differences in geographical, climatic, and developmental conditions, the country controlled by the Union of Socialist Soviet Republics is in many ways unique. Probably the nearest comparison which may be drawn is with the U.S.A. Each consists of a series of self-governing republics, autonomous in local affairs, but grouped under a central authority. The U.S.A. consists of 48 States of which New York is the largest in population (with some 13½ millions) but by no means occupies an overwhelmingly predominant position, as Pennsylvania follows with nearly 10 million, and Illinois with almost 8 million. The U.S.S.R. is a Union of 16 Soviet Republics (since the admission of Estonia, Latvia, and Lithuania, in August, 1940) but by far the largest is the Russian Soviet Federal Socialist Republic, which occupies more than 6 million sq. miles out of just over 8 million sq. miles in the whole Union, and contains upwards of 109 million persons of the 170 or so million population of the Union.

As long ago as 1935 Marshal Stalin said "The U.S.S.R. would be inconceivable as a State without first-class railway transport

linking its many regions and areas into one whole." This remark is more than the truism which it sounds superficially, inasmuch as it means that the highly centralised and industrialised Soviet régime, in contrast with the loosely knit Russian Empire, has been made possible only by the development of its transport. In a comprehensive article on the Organisation and Development of Railway Transport in the U.S.S.R. which Professor Dr. T. S. Khachaturov contributes this week (pages 269 to 272), he describes the extensive alterations which have been made in the railway system since the last war. He contends that, before the Revolution, Russia endeavoured to use the European method of operation (with relatively light locomotives and small two-axle wagons) for low-density long-distance freight traffic over railways which were mainly single line, and thus more suited to bulk traffic in heavy trains. Most of the new methods introduced were on the American model, using heavy trains with a low density of movement, but, with the passage of time, the Professor asserts that a new type of railway transport has been created, combining the best features of the American and European systems of operation.

The reorganisation and extension of the Soviet railways was but part of an enormous industrial development scheme including industry and agriculture, with the object of achieving the general economic aim of "increasing the public wealth, of steadily improving the material conditions of the working people, and raising their cultural level, of consolidating the independence of the U.S.S.R., and strengthening its defensive capacity." All items of the plan were interconnected, and therefore the State fixed the volume of every item and assigned to each branch of the national economy its task and its quota of material and labour. A delicately-adjusted balance was secured which would have been upset by any departure from the rigid allocation of available materials and labour. In other words, the Soviet régime, from its inception, was planned on what we of the Western democracies regard as a wartime emergency basis. This was because potential demand was constantly ahead of practicable supply, whereas in Great Britain, the U.S.A., and other large countries, equipment and services were persistently employed inadequately.

Canals and inland waterways play no inconsiderable part in Russian transport, but they were responsible for only 8 per cent. of the whole of the inland freight traffic immediately before Russia became involved in the present war, whereas the railways carried no less than 89 per cent., and motor transport but 3 per cent. In effecting the reconstruction of its railway system, the Soviet Union placed primary emphasis on bulk freight traffic, with passenger traffic occupying that subsidiary place which other countries assign to it only in war conditions. Professor Khachaturov states that in 1913 the average gross weight of a goods train in Russia was 488 long tons, and that by the outbreak of the present war it had reached 1,284 tons. He compares the latter figure with an average gross weight of a goods train in the U.S.A. at approximately 1,700 long tons, and in Great Britain at 350 tons. With the progress of successive five-year plans, the railways of the U.S.S.R. have developed a high-density traffic similar to European railways, while using heavy-weight trains which approximate to American weights. He therefore contends (as already mentioned) that a new type of railway transport has been created, combining the best features of the American and European types of transport, and ensuring a high level of efficiency in operation in meeting the requirements of the planned economy of the U.S.S.R.

The account given of wartime railway transport in Russia is vivid. Our own railways escaped the upset which an invasion would have caused, but have experienced many of the difficulties which beset the Russian lines. Our operating departments have known full well the trouble caused by urgent military movements, alterations in plans at short notice, changes in the normal flow of traffic, and diversion of trains from regular routes. Naturally, Professor Khachaturov attributes the success of the Russian railways in surmounting many obstacles to the advantages of the Soviet political and economic régime. We would point out the Americans are equally emphatic that the wonderful wartime performance of their railways has been accomplished because the Government has left the management of the lines in the hands of their owners. Possibly the railway organisation in each of these two great countries is suited to its present system of national economy.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

L.N.E.R. Standard First Class Coaches

London, S.W.1. March 6

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Mr. Cook, in a letter in your February 23 issue, states that the fitting of anti-telescoping posts and beams is hardly necessary on L.N.E.R. stock because they are fitted with centre couplers, Pullman vestibules, and reinforced wooden ends.

I cannot altogether share his view, as the Chinese National Railways have used this identical arrangement for many years—indeed a Chinese car could couple to a L.N.E.R. car without modification—but telescoping nevertheless occurred from time to time when no additional safeguards were provided. Furthermore, as Mr. Cook will be aware, the system is but a modification of the system standard through North America, albeit with 9 in. difference in the coupler height, and it was largely as a result of telescoping that public opinion in the U.S.A. forced the railways to adopt the "battleship" type of heavy all-steel car. I happened to be in the States at the period when the public was flatly refusing to travel in wood-bodied cars, and thus causing them hurriedly to camouflage their remaining wood-bodied cars with steel plates and dummy rivets.

Mr. Cook states that the use of couplers prevents one frame over-riding another. In a proportion of cases it is true that the couplers chance to twist and jam together. But in general the M.C.B. (or Buckeye) coupler has the disadvantage of having no vertical hold whatever. If, for instance, the leading end of the first coach of a train should ride up with the tender, the rear coupler will drop out of clutch with the coupler of the second coach and the first coach will be telescoped by the second. It is true that in the L.N.E.R. and Chinese arrangement some resistance to the uncoupling is exerted by the bottom edge of the vestibule faceplate of the first car which strikes the coupler head of the second car before the heads slide out of clutch, but with the whole weight of the rear of the car on the faceplate edge, the faceplate plungers bend like tallow, the faceplate lifts, telescoping occurs, and the faceplate will either

be found lying flat on the floor of the first car, or have disintegrated.

With the millions of footpounds of momentum involved in the collision of ordinary trains at ordinary speeds, it is not surprising that anti-telescoping posts and beams are themselves often bent into fantastic shapes. But no actual case of shearing of the 10-in. x 4-in. posts has yet been noted.

There will be high-speed and intense rail-road competition after this war and it is by no means impossible that cases of telescoping will be seized on by interested parties as opportunities to fan a public demand for all-steel coaches. This would embarrass the railways at their most vulnerable period and could easily cause a crisis that would prejudice the future of the railways in their present ownership.

The scheme outlined is a compromise which, if adopted on any large scale, should tend to satisfy public opinion and thus stultify agitation.

Yours, etc.,

KENNETH CANTLIE

Railway Stockholders' Campaign

"The Dell," Somerset Way,
Iver, Bucks. March 7

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—As you are aware, at the close of the annual general meeting of the Great Western Railway Company, a resolution was carried with the object of bringing further pressure to bear upon the Government and thus securing a higher annual rental than that agreed.

I was one of the four dissentients and perhaps you will allow me to state the main objection to this agitation. To my mind, this is above all a question of business integrity. Is an agreement made to be honoured, or is it a mere "scrap of paper" to be repudiated, with much squealing, when it fails to come up to expectations? Persistence in the latter attitude not only indicates a serious deviation from the straight course pursued and the high traditions maintained by our British railway companies, but it also strikes at the very foundations of railway business, which largely consist of pacts and agreements.

The unworthy suggestion of duress has been strongly denied,

and the decision given, by the Government. Whether or no it was a mistake to sign the document, the fact remains that it was signed.

Full advantage should of course be taken of the provision in the agreement for undue wear and tear, and the railway officials are not overlooking this point, as we heard today.

Meanwhile, let us adhere to our bargains, good, bad, or indifferent. Otherwise, we fight with boomerangs, which will rebound on us, and rightly so.

Yours, etc.,

N. R. MURRAY

Re-employment of Railway Staff in the Forces

London. March 2

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Though I am not connected with the railways of this or any country I read your journal each week, and must confess that the excellence of the publication is responsible for my interest in the various matters raised from time to time.

Anent your correspondent's contribution of "Railway Re-Employment of Staff in the Forces," this certainly must have been very re-assuring to many railway employees in H.M. Forces; just for them to know, indeed, that their future interests were being considered when they are no longer required to participate in war. There will, however, remain some delicate problems to settle, unless the railway companies can agree on some policy of recognition by ascertaining the progress of other of their employees who are in the Forces.

To quote an instance, it would be interesting to know the relative status of a junior clerk on one of the main-line companies who having joined the Forces, was impressed into the R.A.S.C. as a shorthand typist. His ambition, however, had always been with railways and particularly locomotives. Even when taking a business training at secondary school, this youth attended an evening school to absorb technical engineering. His progress was upset by the outbreak of war.

He did not wish to pursue the clerk's career either in the railway company or in the army. In fact, before he joined up he had almost secured a transfer to the locomotive department of his company. He therefore informed his superior officers in the army of his desires, ambitions and knowledge of engineering, and after much ado he was finally transferred to an operating company of the Royal Engineers which gave him scope to further his talents.

Here his knowledge acquired over many years of enthusiastic enquiry was put to practical experience and this man is now an experienced locomotive driver, perhaps not a "top link" driver, but one nevertheless with a thorough practical knowledge of many different kinds of locomotives and different roads. What will the companies do for such men? Is the knowledge they have gained to be thrown on the scrap heap and such a person be given alternative of being a clerk or leaving the clerical side, which such a person really detests, or will he be given an opportunity of displaying his talents to his own advantage and the welfare of his fellows?

Also the position of all would be "premium" pupils is one requiring elucidation. Are we going to lose a generation of future technicians? These persons go away boys; they return as mature adults, and have never had a chance.

These problems, I know, are bound to arise, but perhaps some of your readers or the companies themselves would cast a ray of hope for such.

Yours faithfully,

RAILWAY FAN

British Work on Persian Railways, 1942

176, Allestree Lane,
Derby. March 6

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Congratulations on your article entitled "British Work on Persian Railways, 1942." This is the first appreciable notice I have seen in any British journal, and if somewhat belated, nevertheless is welcome. An article which appeared in an American magazine some time ago indicated very clearly that the state of affairs on the Persian Railways when U.S.A. Forces took over from the British was, in common parlance, "just nobody's business." I may say that, as a matter of fact, the American officers responsible for the taking over appreciated to the full the difficulties which had been encountered and, in many cases, surmounted, and of which your article gives a very good impression. An additional number of interesting features could be cited as having a vital bearing on this expedition, but would at the moment probably encounter the blue pencil of censorship.

During the British régime the only locomotives available for moving main-line traffic, until the last week or so, were the British L.M.S.R. type "W.D." 2-8-0s and the German-built 2-8-0s and 2-10-0s. You are not quite fair to the former in that you catalogue their defects but fail to point out that during the whole of 1942 they succeeded in hauling the great majority of the Aid-to-Russia traffic; the improvement in the net tonnages quoted were entirely due to the use of these British locomotives. The German locomotives, when in good condition, were excellent performers, and the Henschel 2-10-0 no doubt is the best all-round proposition so far on view on the Iranian State Railways. Unfortunately, the German engines were all too often *hors-de-combat*. A small error has crept in with reference to the Garratt engines. These were out of service due to transverse cracks in the firebox crown and not as stated.

From the central workshops in 1941 (not 1940) the Persians turned out 12 engines. After the introduction of certain British staff and, as far as could be achieved, an L.M.S.R. organisation or shopping and repair, the succeeding twelve months saw an output of 97 engines. Equal achievements were recorded by other departments also and thus were our Russian Allies kept in the field, the summit of our purpose and an important factor in the war.

Yours faithfully,

H. G. NEALE,

Works Manager, Central Workshops, Teheran, 1942

War Bonus on Railway Pensions

Watford, Herts. March 5

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I read with interest the letter in your issue of February 23 from Mr. Fred. Radford of Derby, suggesting the payment of war bonus to railway superannuitants, and agree something should be done in this direction, particularly as numbers of the staff, owing to the war, have stayed on in the service after reaching retiring age. It may not be generally recognised that in consequence of this, railway superannuation funds have reaped a considerable financial advantage, and the following three examples demonstrate this point so far as the L.N.E.R. and L.M.S.R. funds are concerned.

Take, for example, three members of the staff who have stayed on in the service for, say, three years after reaching retiring age, their retiring salaries being respectively £300, £600 and £1,200 a year. In each case the superannuation fund will have benefited by sums exceeding the amounts they will be called on to pay out in respect of lump sums, as shown below:—

Retiring salary	Amount by which fund has benefited	Maximum lump sum payable on retirement
(a) Salary £300	£500	£450
(b) " £600	£1,000	£900
(c) " £1,200	£2,000	£1,800

Below are details in the case of (a) illustrating how the above calculations have been made:—

Additional revenue received by the fund:—

3 years' contributions to fund at £12 a year £36
3 years' interest on lump sum of £450, say 45

Plus saving to the fund:—

By not paying out 3 years' pension at £150 a year .. 450
531

This increased revenue to the superannuation fund would be nearly doubled in cases where a member of the staff remained in the service until the age of 65.

It could not be argued logically by the railways that this additional revenue received by the funds is discounted by the fact that they have had to pay, instead of pension, full salary during the 3 years in question, as had the staff in question retired at 60 the railways would have had to fill their positions and pay their successors very nearly the same salary.

With the decreased purchasing power of the £, unless something is done, the prospects for many at present on the funds and others about to retire, is anything but bright, and it is to be hoped the railways will give favourable consideration to this feature. Surely they could not reasonably refuse to make some increase in the pensions of those who have remained in the service during the difficult war days after reaching retiring age and helped to swell the coffers of the funds by such considerable sums.

Yours faithfully,

ONE ABOUT TO RETIRE

The Scrap Heap

OUR MASTERS

Our lives are overshadowed by controls, permissions, coupons, forms and inhibitions. Some figures of the stranglehold are eye-opening. Before the war the main Civil Service departments had 371,050 employees. By 1944 the figure had grown to 678,470. At this moment it numbers about 800,000, with obvious hopes of the million mark. One in fifty of the once free and independent people of this country is an official paid by us to regulate our lives, to impose upon us the machinery of bureaucratic tyranny—not, nowadays, so very much unlike the beginnings of Fascism.—From the "Sunday Express."

AT THE SOUTHERN RAILWAY MEETING
Stockholder: Mr. Chairman, you started your speech with a compliment to the General Manager. Surely he is an important enough gentleman to figure in the report. I cannot find his name anywhere. I should also like to know by name every member of the board as he comes in.

The Chairman: I am sorry the name of the General Manager does not appear in the report. We shall have to find a home for it somewhere. His name is Sir Eustace Missenden. Sir Herbert Walker tells me it never has appeared, but we will try to get Sir Eustace Missenden's name in print in future. As to the names of the directors, if you like I will call them to their feet one by one. At a rotary meeting you appear with your badge with your name on it and your trade. I think that would be rather difficult at a meeting such as this.

A SCOTTISH SECRET

Scotland shared in one of the best-kept secrets of the war—the arrival here from Russia of M. Molotov, Commissar for Foreign Affairs in the Soviet Union, on May 20, 1942. It can now be revealed that for at least a week before his arrival by air at an East of Scotland aerodrome a

"ghost train" was running between London and Edinburgh. On board were M. Maisky, the Soviet Ambassador, and Sir Alexander Cadogan, Permanent Under-Secretary for Foreign Affairs, with their staffs.

Taxi drivers at the Waverley Station cab rank in Edinburgh recognised M. Maisky leaving this special train carrying brief cases. The hush-hush train was rejoined later by the distinguished party and went north, and a day later returned south. The train reappeared at the Waverley Station a few days later, and the Soviet Ambassador and Sir Alexander Cadogan were again recognised by taxi drivers.

On the morning of May 20 the hush-hush train made a halt of 15 minutes at the station to enable engines to be changed. The blinds of the coaches were drawn. Railway police guarded all the entrances to the platform, and curious porters were warded off. After the change of engines, the train steamed off for London.—From "The Glasgow Herald" of March 3.

100 YEARS AGO

[From THE RAILWAY TIMES, March 1, 1845]

ITALIAN AND AUSTRIAN RAILWAY COMPANY.—CAPITAL 30,000,000 florins convention, equal to 3,000,000 sterling, in 60,000 Shares of 500 florins convention, equal to 500 each.

ENGLISH DIRECTORS.

William Jackson, Esq., Birkenhead, Chairman.
Thomas Alexander, Esq., York-place, Portman-square.
William Biddell, Esq., Old Broad-street.
William Betts, Esq., Bevis Mount, Southampton.
William Fechney, Black-bread-street.
Ralph Bonfil, Esq., Suffolk-street.
Joseph Hegan, Esq., Liverpool.
Robert Wm. Kennard, Esq., Upper Thames street.
Francis J. Vanseller, Esq., St. Mary-axe.

BANKERS.

London—Messrs. Denison Heywood, Kennards, & Co.
Liverpool—Messrs. Arthur Heywood, Sons, & Co.
Engineer—J. K. Brunel, Esq., F.R.S.
English Solicitor—William Byran, Esq., 6, Old Jewry.
Notice is hereby given, that the further deposit of 10s. per share, reserved by the Letters of Allotment, must be paid to the respective Bankers of the Company on or before the 28th March, inst. The payment of this Call is necessary, as the Chairman, with a Deputation of the Directors, will proceed to Italy in a few days with full power to conclude the negotiations with Foreign Governments.

In this country a man who buys a thousand pounds worth of shares in hopes of capital appreciation is apt to be looked upon as a felon; in the United States he is thought to be following the jolly old American way of life. Our normal channels for the investment of savings in industry are clogged with the sediment of moral perplexity, and unless we get over it the re-equipment of British industry after the war will be seriously handicapped.—From "The Manchester Guardian."

C.N.R. WINTER TRAVEL

A new "speed" record was established during January last on the Canadian National Railways from Hemmingford, Quebec, to Montreal. The 40-mile journey took three days. The train left Hemmingford one morning and came to a halt in deep snow a mile or so from St. Michel, 30 miles southwest of Montreal. A snow-plow arrived but in an attempt to push the train the baggage van was derailed. By the time the van was back on the rails, the engine had become frozen. The passengers spent the night in the guard's van. The next day another snow-plow was overturned and the passengers stayed in the guard's van for a second night. Next day the passengers continued their journey by other means and arrived at Montreal that night.

ON LIBERTY

If, indeed, all the high talent of the country could be drawn into the service of the Government, a proposal tending to bring about that result might well inspire uneasiness. If every part of the business of society which required organised concert, or large and comprehensive views, were in the hands of the Government, and if Government offices were universally filled by the ablest men, all the enlarged culture and practised intelligence in the country, except the purely speculative, would be concentrated in a numerous bureaucracy, to whom alone the rest of the community would look for all things: the multitude for direction and dictation in all they had to do; the able and aspiring for personal advancement. To be admitted into the ranks of this bureaucracy, and, when admitted, to rise therein, would be the sole objects of ambition.—From John Stuart Mill's essay "On Liberty"

DEFENDER OF THE FAITH

"And I still don't think it's a good Bill," said Alice.

"Well, that's a very wrong and intransigent attitude to adopt," returned the Red Queen. "What right have you to be critical when Sir John Anderson says the Bill is wisely conceived and skillfully drafted?"

"Because Sir John Anderson is there to defend everything the Government does, and a very fearless and unflinching yes-man he has shown himself. If the Government had decided to make the President of the Board of Trade Archbishop of Canterbury Sir John Anderson would have said it was a very timely and well-chosen step and had the full approval of the Treasury."

"You sound to me," said the Red Queen, suspiciously, "to be denying the divine right of Governments to be ever inspired and always infallible."

"I do," said Alice. "Otherwise why should we change them?"

"We don't," announced the Red Queen, firmly. "At least, not nowadays. And I hope this one will last for ever and Sir John Anderson will always be there to defend its unparalleled sagacity and beneficence."—From "The Manchester Guardian."



"I'm not taking any chances, he was made in Germany"

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

UNITED STATES

Derailment of the "Viking"

On December 24 last the twelfth and thirteenth coaches of the Chicago & North Western Railway "Viking" express, travelling from the Twin Cities (Minneapolis and St. Paul) to Chicago, were derailed when the train was running at 50 m.p.h. just to the east of Poplar Grove, Illinois. Fortunately, one of these two vehicles was not carrying passengers. In the other, which rolled down a 15-ft. embankment, one passenger was killed, and 21 were injured. The cause is believed to have been a broken rail.

Diesel-Electric Trains in Collision

A collision which involved two diesel-hauled trains has been the subject of an inquiry by the Interstate Commerce Commission; it occurred on November 12 on the main line of the Chicago, Burlington & Quincy Railroad at Fairmont, Nebraska, 63 miles west of Lincoln. One of the trains involved was the "Pioneer Zephyr," the first lightweight streamline train with diesel-electric haulage to run on United States metals, and now over ten years old.

The express had been delayed at Fairmont, and had just restarted, when it was run into at 5 m.p.h. by a diesel-hauled freight train travelling at 15 m.p.h. The fireman of the former had laid down a lighted fusee 100 yd. in rear of his train, and the freight train had been checked by yellow caution indications at automatic colour-light signals 6,935 yd. and 1,220 yd. from the scene of the accident; a third signal 80 yd. from the point of collision was giving a red stop indication. Fog had reduced visibility to less than 250 yd. The driver of the freight train, it is stated, failed to get his train well under control after receiving the caution indications.

The rear end of the streamliner, a lounge car, was crushed inwards for some 21 ft., and four of its passengers were killed, and six injured. The locomotive of the freight train was of the 5,400 b.h.p. quadruple-unit type, and was hauling 115 bogie wagons.

Three Collisions on Successive Days

A remarkable series of collisions on the Northern Pacific Railway, on September 18, 19 and 20 last, one of which involved the special train used by Governor Dewey in his presidential campaign, has been the subject of reports by the Interstate Commerce Commission. Two of the accidents occurred in the vicinity of Castle Rock Station, Washington, on the double-track main line from Portland to Seattle, which is used also by trains of the Great Northern, Union Pacific, and Milwaukee railways, and which at the time of the collisions was carrying an average of 50 train movements daily.

The first collision was the result of a westbound freight train, drawing out of the siding at Castle Rock, being run into by a Great Northern freight train travelling in the same direction at 30 m.p.h. This the I.C.C. report attributes to the crew of the former not having allowed sufficient time, after opening the switch to the main line, for the automatic block signals in rear to give a stop indication to any following train which would enable the latter to pull up clear of the obstruction. The report recommends the provision of derails working in conjunction with electric locks on the switches and with the block signalling. This collision caused fouling of the eastbound track, and the westbound line had

to be used for eastbound movements for 18 miles.

Governor Dewey's Special

The second of the accidents, just to the west of Castle Rock, was caused by Governor Dewey's 13-coach special running into the rear of a passenger special at 25 m.p.h.; both were Great Northern trains travelling east. The former had been stopped by a flagman, and the latter had reduced speed from 60 to 45 m.p.h., in preparation for slowing past the scene of the previous night's accident, when the standing train was sighted ahead. The automatic block signalling over this section incorporated no provision for wrong-line working, and a warning fusee dropped by the crew of the stopped train did not burn long enough to give warning to the second. The report recommends the Northern Pacific to draw up and to enforce better safety rules for emergency wrong-lines working.

Error by Train Dispatcher

The third collision occurred head-on between two freight trains, both travelling at 30 m.p.h., on the Hoquiam branch, which is worked by timetable and train order rules only. The report states that it was due to a serious blunder by a train dispatcher, which resulted in the two trains, both of them special workings, entering the opposite ends of the same block section without either having any knowledge that the other was running. The I.C.C. recommends revision of block working regulations on the line concerned.

In all, four persons were killed, and 69 were injured, in the three collisions described above.

ARGENTINA

The Yacuiba Branch Railway

Regular goods traffic in full car loads has now been begun over the section from Tobatirenda to Pocitos of the Central Northern Argentine State Railway. Heretofore, ordinary passenger and goods traffic on the Yacuiba branch has been worked only as far as Tobatirenda. The new section extends to Pocitos, which is just short of Yacuiba on the Argentine-Bolivian border. There is no regular passenger traffic, and the limitation of goods traffic to full car loads would appear to indicate that station equipment and staffing are not yet complete.

MEXICO

Short Railway to Discontinue Operation

The Jalapa-Teocelo Railway, of 19 miles, in the State of Vera Cruz, has made application to the Federal Government for permission to cease operations. It is one of the feeder lines to the Inter-oceanic Railway. A parallel highway is stated to make the further existence of the line unnecessary.

Changing Traffic Trends

The southbound loaded-vehicle movement through Nuevo Laredo during the period May to August (inclusive) of last year averaged 2,354, against 1,723 for the same months of 1943. The northbound loaded-vehicle movement through the same railway border point averaged 1,549 during this period, compared with 2,159 in the corresponding months of 1943. The foregoing figures reflect the changed trend of foreign trade in 1944, with emphasis on the southbound movement. The number of vehicles moving southward during 1944 was much greater than in 1943; on the other

hand, there was a considerable decline in the number of vehicles moving northward in 1944, compared with the preceding year.

CHILE

Proposed New Railway

Plans are progressing for the construction of a railway from the town of Puente Alto, where Chile's large paper manufacturing industry and some textile firms are located, to Nos on the main line from Santiago to the south. Such a line would relieve the freight congestion in the Central Station of the capital. It is reported that the carbide factory at San Bernardo near Nos has offered to give two locomotives, 20 goods wagons, and rails.

SWITZERLAND

New Junction Line at Geneva

Work is proceeding on the connecting line between the Cornavin Station at Geneva and La Praille, (described in the September 26, 1941, issue of *The Railway Gazette*, with a plan of the route), which ultimately is to provide a direct link between the Swiss Federal Railways system at Cornavin and the French National Railways line out of Eaux Vives terminus, on the south side of the Rhône. The cutting west of Cornavin, on the main line to La Plaine, is being widened to take a third independent track as far as St. Jean, where the new line diverges southwards in tunnel, and then emerges to cross the Rhône at the famous "Junction" of this river with the River Arve. Here piles have been driven to carry the railway viaduct foundations, and work on the viaduct itself is now well above the water level.

SWEDEN

Railway Budget

A total amount of kr. 120.35 million will be placed at the disposal of the State Railways during the next financial year. About kr. 39.24 million is to be spent on the purchase of rolling stock, electric and steam locomotives, and other items. For the doubling of main-line tracks an additional kr. 10 million is required. Re-laying of rails, it is stated, is to be continued, and kr. 10 million is required for this purpose (compared with kr. 8 million in the current budget). Considerable allowances are asked for safety measures of various kinds, for example, for the elimination of level crossings.

Stockholm Underground

In the past three years the population of Stockholm has increased by about 45,000, and by the end of 1944 was some 635,000. Transport problems have increased considerably, and the scheme for an underground railway, which has been discussed for some years, came again before the Municipal Council last December, when it was decided, despite the present high costs, to take the work in hand without delay.

The first line to be built will be nearly three miles long, and, at present prices, its cost will be about kr. 50,000,000 (compared with an estimated cost in 1938 of some kr. 35,000,000). It will be of double track. The line will connect the western suburbs with the centre of the city, and will have six intermediate stations.

It is believed that it will be possible to complete the line by the middle of 1949. The building of a second line is to be placed in hand shortly. It will take about five-and-a-half years to complete both lines and their connecting links, all of which will result in a system of approximately 7½ route-miles, linking the centre of the city with the western and southern suburbs.

Organisation and Development of Railway Transport in the U.S.S.R.

In a carefully-planned economy, 89 per cent. of the inland freight traffic is carried by rail

*By Professor Dr. T. S. Khachaturov**

TRANSPORT is of particular significance to the national economy of the Soviet Union in view of the great distances involved. From the western frontier of the U.S.S.R. to the Pacific is approximately 6,000 miles; from the Arctic Ocean to the Southern frontier between 2,500 and 3,000 miles; from the Donetz Basin to Leningrad about 1,000 miles, and from the Kussnetz Basin to the Ural metallurgical centres about 1,300 miles. Heavy traffics, such as coal, iron ore, metals, timber, oil, and grain, have to be carried over these vast distances, and it is obvious that the Soviet Union requires transport which can carry this bulk traffic quickly and cheaply and which can ensure close contact between the distant areas of the country.

The Soviet Union possesses a considerable network of transport communication. The length of the railways is 66,000 miles, of which 30 per cent. are double-track lines. The length of navigable rivers amounts to 68,000 miles, in addition to which the length of floatable rivers is 44,000 miles. There are several thousands of miles of canals and other artificial waterways. Some of the new canals are very long, for example, the Baltic & White Sea Canal (141 miles), and the Moscow-Volga Canal (79 miles). The total length of highways and other roads of improved type is in excess of 220,000 miles. The number of the motorcars before the war was about one million. Regular air lines covered about 60,000 miles.

Railways occupy the principal place in the Soviet transport system, for before the war the railways carried some 89 per cent. of the whole inland freight traffic, whereas waterways were responsible for 8 per cent., and motor transport for only 3 per cent. In 1935 Marshal Stalin said: "The U.S.S.R. would be inconceivable as a State without first-class railway transport linking its many regions and areas into one whole."

Principles of Transport Planning

All the main branches of Soviet transport are owned by the State and are developed in accordance with the unified State plan for the whole national economy, which determines the development of industry, agriculture, transport, and other aspects of the national life. According to the Constitution of the U.S.S.R., the national economic plan has the general aim of "increasing the public wealth, of steadily improving the material conditions of the working people and raising their cultural level, of consolidating the independence of the U.S.S.R. and strengthening its defensive capacity." All items of the plan are interconnected.

Economic plans are made for periods of five years, one year, and a quarter of the year. Five-year plans are long-term plans. One-year plans define the programme for every separate year in accordance

with the current economic situation, and are made on a more detailed scale than the five-year plans. The quarterly plans correspondingly define the programme of the one-year plan for the given quarter. In addition, each branch of economy makes its own monthly production plans.

Before the beginning of the planned period, the Government, through the State Planning Committee, fixes the general programme for the preparation of the plan, according to which the general volume of production is determined for coal, oil, and ore output; production of iron and steel; machinery; building; agriculture; cattle-breeding; amount of traffic for different branches of transport; and so on. The programme also defines the level of labour efficiency, production costs for industry and transport, and the amount of investments. On the basis of this broad programme, every branch of the national economy begins to work out its own plans, at the same time co-ordinating them with the plans of other branches.

Planning of Freight Traffic

The initial item of the transport plan is that for traffic, specifying the volume of traffic for all the different goods and routes according to requirements. The territory of the Soviet Union is divided into various administrative areas, and the volume of forthcoming production and consumption of different goods is determined not only for each branch of economy but also for each area.

According to the geographical allocation of the production and consumption of each commodity, for example coal, the amount of this commodity to be taken from and to be brought to each area is calculated. Then it is arranged—also for each commodity separately—which production areas are to cover the requirements of which consumption areas. This interconnection between the areas of origin and destination for each commodity is made with a view to securing the shortest possible total haul of all goods.

The fixed general volume of traffic is distributed between the various kinds of transport. As all these belong to the State and are parts of a single and unified system, the most effective distribution of work between them may be made. The plan takes into account the special features both of the various forms of transport and of the goods conveyed. In a number of cases combined transport is allowed for, such as rail and water transport, rail and road transport, and so on. The plan provides measures and arrangements to facilitate the transfer of goods from one branch of transport to the other, for quick re-loading, and for the timely provision of rolling stock.

As Russian rivers are frozen over in winter, inland water-transport in most parts of the Soviet Union is capable of being used for only six or seven months during the year. Inland waterways are used for the transport of certain goods carried in bulk, such as timber, oils, grain. In order to make use of the

waterways immediately they become navigable again, an adequate quantity of goods is delivered to the river ports by the early spring.

Motor transport is engaged mainly in collecting and delivering goods to and from the railway stations and river ports, on the one hand, and small towns and villages on the other. In addition, motor transport carries internal traffic in towns and villages. In the eastern and southern parts of the country, where there is a lack of railways and waterways, motor transport also carries long-distance and main-line traffic; for example, from the Trans-Siberian Railway to the town of Yakutsk and to other distant destinations.

Special high-speed conveyance of passengers, goods, and mail is effected by air transport. In the less accessible regions, such as the southern mountainous parts of Central Asia and the northern parts of the Far East, aviation provides the main transport.

After the volume and distribution of traffic has been fixed, that part of the plan determining the operation of each kind of traffic is worked out. For example, a technical plan is made for railways. This determines the total run of the rolling stock, its rate of working, its allocation in accordance with loading requirements, the work of the railway stations, and so forth. On this basis calculation is made of the number of locomotives, passenger and freight vehicles, and technical equipment required, as well as the quantity of fuel, material, and personnel.

Since the supply of new rolling stock and equipment for transport is not unlimited, the plan must provide for the most efficient use of existing rolling stock and other railway equipment. As the amount of future work and the capacity of the existing rolling stock and equipment are known, the volume of new requirements can be fixed easily; in other words, the number of new locomotives and wagons, additional sidings, additional water-supply arrangements, and the other facilities required for increasing the carrying capacity of the existing lines. At the same time the programme for the construction of new lines is prepared.

A special part of the plan deals with such financial questions as receipts from the conveyance of passengers, goods, and luggage; operating expenses; and the volume of capital investment. Main limitations of this part of the plan are determined by the Government; every care must be taken not to exceed the limits of expenditure fixed, and actual capital expenditure must not go beyond the investments planned.

At all stages of its preparation, the plan for transport is co-ordinated with the plans for other branches of national economy, primarily those for industry, which supplies locomotives, wagons, rails, fuel, and other material. The financial part of the transport plan is determined by the State Budget.

So far as organisation is concerned, every branch of transport is administered by one of the People's Commissariats, that is, Ministries. There are several People's Commissariats dealing with transport: the People's Commissariat for Railway Transport; the People's Commissariat for River Transport; the People's Commissariat for Marine Transport; the Central Road Department; the People's Commissariats for Motor Transport (in the different Republics of the U.S.S.R.), and the Civil Air Communications Depart-

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ment. Each Commissariat draws up its own plans according to the type of transport dealt with, and all these plans are co-ordinated by the State Planning Committee.

Increase of Railway Traffic

Under the Soviet system, transport as a whole and in particular railway transport has been highly developed. The amount of freight traffic carried by the railways increased from 130 million tons (or 40 thousand million ton-miles) in 1913 to 584 million tons (or 239 thousand million ton-miles) in 1939. Passenger traffic increased from 184 million passengers (or 15 thousand million passenger-miles) to 1,200 million passengers (or 60 thousand million passenger-miles) during the same period. Such a rapid increase in freight traffic is due to the economic changes that have taken place in the Soviet Union, to the high development of productive forces, and chiefly to the growth of industry.

Rapidly-growing traffic could not be handed with the technical equipment left over from old Russia. A considerable strengthening and development of railway transport was needed. The problem arose—What course of development should the Soviet transport follow? What principles should be the basis for this development?

Types of Railway Transport

It is possible to recognise two main types of railway transport in economically-developed countries; the American and European types. The American railways use heavy trains with a low density of movement. European railways use lighter trains with a high density of movement. Accordingly American railways employ heavy types of locomotives and four-axle freight cars of great capacity, but the percentage of double-track lines is low. The railways of most European countries use locomotives of considerably less power and almost exclusively two-axle freight cars, but the European railways have a high percentage of double-track lines.

This difference can be explained by the diversity in haulage distances. With long-distance traffic the lowest freight cost for each ton-mile is the decisive consideration, and this can be reached only when the traffic is in bulk and the trains are heavy. With short-distance traffic more importance is attached to using light trains which provide greater flexibility of operation and of service. Under such conditions freight charges per ton-mile are higher; but it should be kept in mind that higher freight charges per ton-mile do not constitute a heavy additional charge to the price of goods when the haul is short.

Before the war average receipts *per ton-mile*, calculated in gold, were: in Great Britain, 7.5 centimes, and in the United States, 2.9 centimes. At the same time, average receipts *per ton* of freight (for the whole distance covered) were: in Great Britain only 4 francs 13 centimes, owing to the short average haul, and in the United States, where the distances are long, 11 francs. The charge *per ton-mile* (and accordingly *per ton*) in the United States would have been much higher had the type of railway been the same as that employed in Great Britain. Had the charge in the United States been, for example, twice as high, a considerable part of the long-distance freight traffic could not have been carried.

The difference of types in railway transport depends also on the volume of traffic. In the United States, where

industry consists mainly of large undertakings and the consignments of goods carried by railways are also very large, heavy trains are more efficient than in European countries, where the scale of industrial undertakings is smaller and the goods are carried in comparatively small consignments.

It is obvious that the U.S.S.R., with its great distances and heavy bulk traffic, required that type of transport which could ensure the lowest freight costs.

Before the Revolution, Russia used the European type of railway, with relatively light locomotives and small two-axle wagons, and in addition the percentage of double-track lines was low. This type of transport did not suit the new tasks and had to be changed radically. It was necessary for the U.S.S.R. to create a new powerful type of railway transport. This task determined the policy for the technical development of the Soviet railways, which has been effected over a number of years, and which is based on the following main principles:—

1. Concentration of traffic on trunk line.
2. Radical technical reconstruction of railway transport, in the first place on these trunk lines.
3. Rationalisation of the work of railway transport as a whole.
4. Construction of new railways to connect up new areas, and improvement of the configuration of the whole railway network.

Concentration of the Flows of Goods

The following data illustrate the concentration of flows of goods on Soviet railways. The average density of traffic increased from 1,200,000 ton-miles per mile of road annually in 1913 to 4,500,000 ton-miles in 1939. In 1939 the average number of ton-miles per mile of road was three times greater than in the United States or Germany, and four-and-a-half times greater than in the United Kingdom.

On some individual lines the density of traffic was considerably greater. There are lines in the Soviet Union which before the war carried in one direction up to 20 million ton-miles per mile of road a year, and some lines which carried a total of 25 million ton-miles in both directions.

Such high-density traffic was made possible only by the reconstruction of the railways. In carrying out this reconstruction, the U.S.S.R. had the opportunity of making full use of its planned system, and introduced the most effective devices of modern railway technique.

Technical Reconstruction

The decisive feature in the development of the Soviet railway transport has been the considerable increase in the weight of the trains. This permitted great volumes of goods to be carried, the advantages of bulk traffic to be used, and made possible a low level of freight charges. This method of coping with the growing bulk traffic was further necessitated by the fact that single-track lines comprised some 70 per cent. of the whole railway system.

In 1913 the average gross weight of a goods train was 488 long tons; by the outbreak of war it had reached 1,284 long tons. In the United States before the war the average gross weight of a goods train was approximately 1,700 long tons, and in Great Britain 350 long tons.

Locomotive Stock

The considerable increase in train weights in the Soviet Union was made possible by the extensive employment of newly-built heavy locomotives. At the

outbreak of war more than half the Soviet locomotive stock consisted of engines built between 1929 and 1940. Without exaggeration it can be said that the locomotive stock of the U.S.S.R. is the youngest in the world.

In building locomotives, Soviet railways endeavoured, as far as possible, to limit the number of types in order to simplify operation and repair. There are at present five main types of goods locomotives and four main types of passenger locomotives.

The principal standard goods locomotive is the "FD" (Felix Dzherzhinsky) type, 2-10-2, with 103 tons on the drivers, that is, twice the size of the principal type of old locomotive. These engines are used on the main lines, and can draw a freight train weight of between 2,000 and 2,500 tons at an average speed of 25 to 28 m.p.h. Very efficient and economical are the new goods locomotives, the "SO" (Sergo Ordzhonikidze) type, 2-10-0, with weight on drivers of 87 tons. One of the advantages of these engines is that they can be used on lines with comparatively light rails. Several hundreds of these "SO" locomotives have tenders equipped for the condensation of exhaust steam so that the same water supply can be used continuously in the boiler. These locomotives achieve economy in water and fuel, and are especially efficient in such arid districts as the Transcasian area.

For fast and heavy passenger trains there are the powerful 2-8-4 passenger locomotives of the "JS" (Joseph Stalin) type, with 85 tons on the drivers. These have the same main parts as the "FD" type, for example, the same boiler, firebox, cylinders, and frame. They attain a maximum speed of about 80 m.p.h.

On some lines diesel-electric locomotives have been introduced for freight service, and experience has shown that they yield great economy of fuel and in repairs. As these locomotives do not require water, they are very convenient for arid districts.

Electrification

Various lines with difficult gradients which handle heavy traffics have been electrified when cheap electric power is available. These lines are in the region of the River Dnieper (Dolginzevo-Saporozhie), the Caucasus (Tiflis-Samtredi), the Urals (Kizel-Sverdlovsk), the Kussnetz Basin (Belovo-Stalinsk), and, in the north, on the Kirov Railway (Kandalaksha-Murmansk). In addition, the Moscow and Leningrad suburban lines have been electrified. Before the war the total of electrified lines was about 1,050 route miles. Main lines are fed with direct current at 3,000 volts, and suburban lines at 1,500 volts, in each case from overhead conductors. The electric locomotives employed, which are in general equivalent in power to the "FD" series, can develop a somewhat greater speed, especially on the steep gradients.

The employment of heavy trains made it expedient to use large-capacity wagons, to decrease expenditure on marshalling, maintenance, and repairs, and to shorten the length of the trains.

Wagon Stock

In 1913 almost all freight wagons had two axles, and a carrying capacity of 15 or 16 tons. These vehicles had screw couplings, and about 15 per cent. of the total were furnished with hand brakes. At present more than a quarter of all freight cars consist of four-axle wagons (on bogies) with a carrying capacity of 50 to

60 tons. These wagons have a strong steel frame and skeleton. Because of the bulk traffic in industrial raw materials, such as coal, iron ore, and building materials, a large number of open wagons (gondolas, hoppers, and platforms) was introduced. Among the new wagons there are now such special types as refrigerator cars for perishable foodstuffs, tank cars for mineral oils and chemicals, and dump cars for building materials. For passenger service many carriages, and in particular sleeping cars, have been built. As with locomotives, the number of standard types of new freight and passenger cars was strictly limited in order to simplify their operation and repair.

Brakes and Couplings

In the years before the war all goods trains had automatic braking. About two-thirds of the goods vehicles were equipped with automatic compressed-air brakes of the type devised by the Soviet engineer Matrosov. The rest of the goods stock was equipped with connecting through pipes.

Employment of powerful locomotives and the increase in train weights made necessary the strengthening of couplings. Before the war one-third of the goods stock was fitted with automatic couplings of a Soviet type capable of bearing a sustained drawbar pull of 65 tons.

Permanent Way

The permanent way has been strengthened considerably. Heavy rails, with rubble and gravel ballast, have been laid over a large part of the railway system, and the number of sleepers per mile has been increased considerably. Mechanisation plays an important role in the reconstruction and repair of the permanent way. The railways possess powerful machines for lifting the track and ballasting, machines for laying previously-prepared sections of track, and so on, and many minor machines for track maintenance and repair.

Many measures have been taken to increase the carrying capacity of existing lines. Various sections have been double tracked, and several thousands of miles of line handling heavy traffics have been equipped with the automatic block system. Many stations have been reconstructed and enlarged. At the large marshalling yards about thirty mechanised humps with retarders have been constructed.

Rationalisation of Labour

Constant improvement in the quality of the work of railwaymen has played an important part in coping with the increased traffic. A characteristic feature of the Soviet country is a new attitude of the people towards labour, determined by the fact that the means of production belong to the State. Soviet railwaymen realise that by improving the quality of their own work they also add to the prosperity of their country, which means in fact to their own prosperity. This consciousness encourages initiative, inventiveness, and the desire to increase efficiency.

Hundreds and thousands of enterprising locomotive drivers, dispatchers, shunters, signalmen, and so on, were the initiators of new methods of operation which made possible the increase in the speed and weight of the trains, ensured economy of fuel, reduction of halts, and improvements in the repair and maintenance of rolling stock and other equipment.

It is desirable to draw attention to the increased qualifications and experience of

Soviet railwaymen. Thousands of engineers graduate from railway transport institutes.* A network of secondary railway schools trains technicians such as stationmasters for small stations, dispatchers, foremen, and so on. There are elementary schools which train locomotive drivers, skilled shed workers, and track and railway-building staff. At present the position has been reached in which nearly all railway workers have had some technical education. In this way large numbers of progressive railwaymen of a new type has been created. These men have succeeded in mastering the complicated technique of railway transport and have attained a high level of rationalisation of their work.

General Results of Reconstruction

The following figures illustrate the improvement brought about by reconstruction and rationalisation. The average run of a goods engine increased from 74 miles every 24 hours in 1913 to 158 miles by the outbreak of war. The average run of a goods wagon during the same period increased from 45 miles to 90 in 24 hours. The average running speed of all goods trains increased from 13 to 21 m.p.h. Soviet railway transport has radically changed its technical characteristics, as the following figures show:—

	Gross weight (in tons) of freight train	Annual number of passenger and freight train miles per mile of road	Annual number of ton-miles of freight per mile of road
		(thousands)	(millions)
U.S.A. (1937) ...	1,700	4	1.5
Great Britain (1937) ...	350	20	1
Germany (1937) ...	700	15	1.5
France (1937) ...	600	11	1
Russia (1913) ...	500	6	1.2
U.S.S.R. (1939) ...	1,300	10	4.5

The above table shows that the railways of old Russia used light trains similar to those employed in Europe, but with a low density of traffic as in America. The railways of the U.S.S.R. use heavy-weight trains which approximate to American weights. At the same time they have a high-density traffic similar to European railways. Indeed, a new type of railway transport has been created combining the best features of the American and European types of transport and ensuring a high level of efficiency in operation.

New Lines

Since the Soviet system was established, many thousands of miles of new line have been built, particularly in the eastern areas where there was a scarcity of railways.

Among these newly-constructed railways are: The Turkestan-Siberian (Turk-Sib), linking Siberia with Central Asia; the western part of the Second Siberian line, connecting the new and rich Karaganda coal basin with the main railway network; and the Moscow-Donbass trunk line for conveying coal from the Donetz and Moscow (Podmoscowny) coals basins to Moscow. New lines have been built in the southern Urals, between the Urals and the Volga, in the Caspian Sea region, in the Caucasus, and in other regions. During the war important trunk lines have been built in the region of the Volga, and in the north, such as the Northern Pechora line which goes to the extensive

* The training of railwaymen in the U.S.S.R. formed the subject of an article by Engineer Semenov in our issue of February 16.—Ed. R.G.

coal-mining basin of Vorkuta in the Far North.

Reconstruction and rationalisation of transport and the construction of new lines have played a great part in the economic progress of the U.S.S.R. and in the prosperity of the Soviet people. In addition, the development of transport has been of considerable significance in strengthening the defensive power of the country and enabling the tasks to be expected in the course of a modern war to be fulfilled. The enemy underestimated the strength of Soviet transport as he underestimated the strength of the U.S.S.R. in general.

Railway Transport during the War

Immediately after the outbreak of war railway transport had to handle the mobilisation of the Army. This was greatly complicated by the relatively swift advance of the German armies during the first stage of the war against Russia, and by the systematic air attacks on the railways. Despite these difficulties, the transport system successfully met the demand and secured prompt mobilisation and concentration at the front of millions of Red Army men.

The task of transporting supplies for the Red Army was of exceptional importance. A distinguishing feature of this war has been its mobility, demanding flexibility and punctuality in transport to serve the plans of the Military Command. The brilliant defence of Moscow and the mighty blow inflicted on the Germans by the Red Army near Moscow at the end of 1941, when the enemy had to flee in disorder, were due largely to the prompt and timely transport of fresh divisions, sometimes from far distant areas. During the defence of Stalingrad the railways quickly effected the moves of Red Army formations from other fronts. The construction of new railways in the Stalingrad area was completed in the shortest possible time, and these also were used to carry troops and ammunition. During all the further offensive operations undertaken by the Red Army, in the battles for Leningrad, the Donbass, Kharkov, Kiev, Minsk, and other cities, and in the battles in Roumania, Poland, Hungary, and Germany the railway system continues successfully to perform its functions in delivering all requirements for the victorious operations of the Red Army.

One of the most difficult and complicated tasks of transport has been the provision of supplies for the Red Army, especially at present when lines of communication have been extended to such great lengths. However, the transport system has never failed to bring up regular supplies of ammunition, armaments, fuel, provisions, man-power reserves, and all the other requisites for the operations of an enormous Army equipped with mobile and all other means of modern military technique.

During the first months of the German offensive, unprecedented transport arrangements had to be made for evacuation. In accordance with Marshal Stalin's instruction, thousands of industrial enterprises were moved, together with their equipment and raw materials, as well as hundreds of cultural establishments, institutes, libraries, theatres, and millions of persons. These evacuated factories, in addition to local plants and factories, resulted in a vast growth of industrial capacity in the east, and secured the mass production of military equipment for the Red Army. These changes in the disposition of industry altered the direction

of goods traffic. Before the war coal for the central industrial area had been transported largely from the Donbass, but during the war a vast flow of coal has been coming from the eastern areas. The bulk of the metal, machinery, grain, and other supplies is now being brought from the east, and not from the south as in the past. Huge quantities of ammunition for the front line go from the eastern areas to the west. These changes in the direction of freight traffic have complicated the work of the railways, particularly as many formerly secondary lines with low carrying capacity now have to bear a very heavy traffic. The complexity of the tasks of transport was increased also by the time fluctuations in the volume of traffic. Often, in connection with front-line military operations, railway transport had to rush forward huge quantities of freight. Destinations frequently changed because of changes at the front. So transport had to deal not with old, regular and established freight routes, but with flows of goods which frequently changed their schedules and directions.

Finally, it is necessary to take into account the tremendous devastation inflicted by the enemy. At one time the enemy held nearly half of the railway network of the U.S.S.R., and that the best sections with the latest technical equipment. In retreat the enemy caused heavy damage to the railway system, destroyed almost all railway bridges, a considerable part of the permanent way, engine sheds, wagon depots, buildings and equipment at the railway stations, signal installations, and communication facilities. As it was impossible to repair all this at once, railway traffic was hampered on lines which had been occupied by the enemy.

A number of reasons is given for the successful solving of transport problems in spite of all these difficulties.

First, an important role is played by the fact that railways, as well as other kinds of transport, belong to the State and work according to plan. Planning and centralised direction of economy make it possible to ensure that the transport facilities are co-ordinated with the needs of national economy and of the Army. The U.S.S.R. is able to utilise most fully and effectively its whole transport system and all transport reserves by the manoeuvring of these reserves, correct allocation of rolling stock, distribution of traffic among the different kinds of transport and different routes.

Another important contributory reason for the successful accomplishment of Soviet transport tasks is the intensive work of railway personnel. All the measures designed to improve the work of railway transport arouse the interest and enthusiasm of the workers and are put into effect quickly. Besides this, the railway workers themselves are the pioneers of methods of work which help to intensify the utilisation of transport facilities and to increase the bulk of the traffic carried.

Working Methods

In wartime the problem of the carrying capacity of a number of lines became very acute. An important part in the handling of increased freight was played by a dispatching system, introduced several years before the war, which made possible the utilisation of all the resources of any particular line. In many cases trains were "paired," and this permitted the transit of a larger number of wagons. On certain occasions, when an especially large volume of supplies had to be sent to the front or evacuated, an emergency

caravan system of traffic was used. Under this system, during one part of the day trains moved in one direction only, and during another part they moved in the opposite direction. New methods were introduced to facilitate marshalling work and to improve the use of sidings and of rolling stock. These and similar methods have made it possible to increase considerably the use of the carrying capacity of the railways and have enabled twenty-five or more pairs of trains to be passed through on single-track lines whose estimated capacity did not exceed twenty pairs.

Railway Workers

Mention must be made of the heroic, intensive work of Soviet railway workers. The war has given a number of outstanding examples of the heroism and selflessness of railway personnel. Many examples of heroism have been given by workers who have recently entered railway transport, among them many women. Experience of the employment of woman labour in transport had already been accumulated in peacetime. At the present time women constitute a considerable part of all Soviet railway workers. Alongside the men, Soviet women are now doing important and responsible work in transport. They work as engine-drivers, engineers, stationmasters, dispatchers, signalmen, fitters, machine-men, and so on. Some women hold high administrative posts in the People's Commissariat of Railway Transport and the administrations of various railways.

The heroism of Soviet railway workers has been highly appreciated by the Government. During the war thousands of railway workers have been decorated; 127 of them have received the highest award of the country, the title of Hero of Socialist Labour.

Reconstruction

Reconstruction and repair work was undertaken on a huge scale. Up to the autumn of 1944, traffic had been restored on more than 25,000 miles of railway destroyed by the invaders. This achievement is the result of wartime experience in restoration and the extensive use of special equipment and standard designs of bridges, buildings, and other installations.

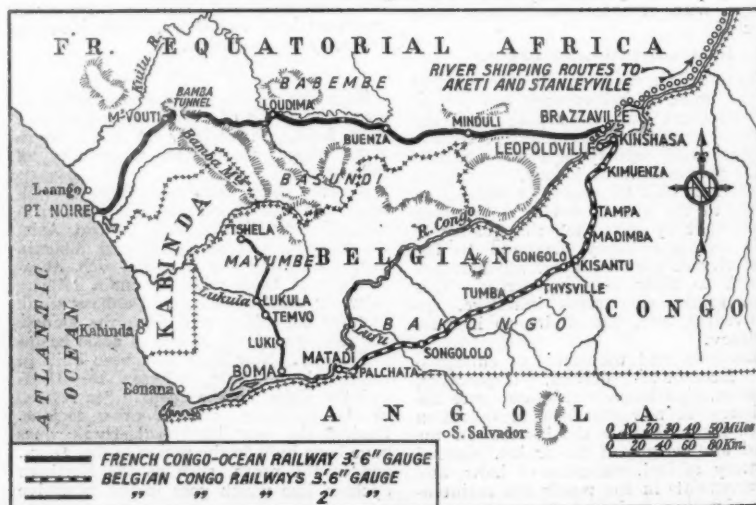
All restoration work has been centralised under the Central Board of the Military-Restoration Works of the People's Commissariat of Railway Transport. This has ensured the most effective organisation of the work through the best distribution and use of man-power and equipment.

During the first World War, the conditions of work of transport were less difficult than in the present war. The volume of traffic was several times smaller. A far smaller part of the transport system had fallen into the enemy's hands. Damages to transport were incomparably less. The main coal basin of the country, the Donbass, was not occupied by the enemy, and the railways were not deprived of their main source of fuel. Notwithstanding those conditions, after the three years of the last war transport had become almost completely disorganised. Loading had greatly decreased, and the number of engines and wagons in disrepair had reached a disastrous total. Traffic on a number of lines was threatened with a complete standstill.

The transport situation at the present time is entirely different. Despite the extremely difficult conditions of work, the great losses and demolitions suffered during the temporary occupation by the enemy of almost one half of the railway network, and shortages of fuel and material, the railways are carrying out their task successfully. Rolling stock is in a satisfactory condition, and essential train movements proceed in general according to schedule.

All these successes in the work of Soviet transport are undoubtedly due to the advantages of the present system of national economy over the system of old Russia, to the advantages of the Soviet political and economic régime, to the competent leadership of skilful and able men, and to the new qualities which the people have acquired during the period of Soviet power. These advantages which have made it possible for the Soviet people, under the leadership of Marshal Stalin, to overcome the tremendous difficulties confronting them in this war, undoubtedly will help them to solve the gigantic tasks of restoration and reconstruction of transport of all other branches of national economy during the post-war period.

The French Congo-Ocean Railway



Some illustrations of traffic on the above line are shown opposite

War Traffics in French Equatorial Africa



One of the first British-built locomotives to work in French Equatorial Africa is shown on the French Congo-Ocean Railway. It is a war standard heavy-freight Beyer-Garratt locomotive ordered by the Ministry of Supply for the War Department



Part of a long train of war supplies passing through Equatorial Africa on the French Congo-Ocean Railway, of 3-ft. 6-in. gauge, which extends from Brazzaville (on the River Congo) through French territory to the Atlantic Ocean at Point Noire

Grand Central Terminal, New York Central System



A general view of the main concourse of Grand Central Terminal, which was opened in 1913. The concourse is 275 ft. long, 125 ft. wide, and 125 ft. high. The windows shown in the rear of the illustration are 75 ft. high

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RAILWAY NEWS SECTION

PERSONAL

G.W.R. CHAIRMANSHIP

The Great Western Railway Company announces that the Rt. Hon. Viscount Portal, P.C., D.S.O., M.V.O., has been appointed Chairman of the company, in succession to Sir Charles J. Hambro, K.B.E., M.C.

Viscount Davidson, who is Deputy-Chairman of the Buenos Ayres Great Southern Railway Co. Ltd., and Buenos Ayres Western Railway Limited, and a Director of the Buenos Ayres & Pacific Railway Co. Ltd., has been appointed to the board of the Central Argentine Railway Limited.

Captain B. H. Peter has been elected Chairman of the Joint Air Transport Committee, which represents the Association of British Chambers of Commerce, the Federation of British Industries, and the London Chamber of Commerce, in succession to Sir Oliver Simmonds.

We regret to record the death on March 5, at the age of 69, of Mr. George Keith, Chairman & Managing Director of Keith Blackman Limited.

Sir Frederick C. Stewart, who is Deputy-Chairman of the North British Locomotive Co. Ltd., has been appointed a Director of William Baird & Co. Ltd.

The late Commander Sir Charles Craven, who was Chairman & Managing Director of Vickers-Armstrongs Limited, Chairman of Gresham & Craven Limited and of the English Steel Corporation Limited, and Deputy Chairman of Vickers Limited, left £79,177.

Mr. H. L. Satchell has been appointed Manager of the Rugby Works of the British Thomson-Houston Co. Ltd., in succession to Mr. A. P. Young, who has retired.

L.P.T.B. APPOINTMENT

Mr. G. P. Barnett, previously Staff Superintendent (Road Transport), London Passenger Transport Board, has been appointed Superintendent of Recruitment & Training. The recruitment and training of railway, bus, coach, tram and trolleybus operating staff of the L.P.T.B. already was centralised, and now the recruitment of the engineering wages grades has been brought under the same centralised control.

INDIAN RAILWAY CONFERENCE ASSOCIATION

On January 22 Mr. S. G. Pick, M.C., E.D., relinquished the post of General Secretary & Director of Wagon Interchange, Indian Railway Conference Association, and left for Bombay, where he has since taken over as Chief Traffic Manager, Bombay, Baroda & Central India Railway.

His post with the I.R.C.A. has been taken by Mr. H. F. Simpson, of the Bengal-Nagpur Railway, who had been Deputy-Director, Railway Board, for the past four years.

The Rt. Hon. Viscount Portal of Laverstoke, P.C., D.S.O., M.V.O., who, as recorded elsewhere on this page, has been appointed Chairman of the Great Western Railway Company, joined the board of that company in December, 1927. He resigned his Directorship in September, 1940, on his appointment as an additional Parliamentary Secretary to the Ministry of Supply, but rejoined the board last November, after he had relinquished his later position as Minister of Works. When Sir

We regret to record the death on March 8 of Lt.-Colonel P. D. Michód, O.B.E., who retired in 1933 from the position of Assistant Signal & Telegraph Engineer, London Midland & Scottish Railway.

We regret to record the death, at the age of 74, of Mr. John Smith, a Local Director of Thos. Firth & John Brown Limited, Sheffield.

The late Sir Frank Pollitzer, who was head of Beck & Pollitzer Limited until his retirement in 1931, left £85,635.

L.N.E.R. STAFF CHANGES

The L.N.E.R. announces that Mr. F. W. Maude, Goods Agent, Ipswich, has been appointed Goods Agent, Bridgehouses, Sheffield.

Mr. J. Craig, M.B.E., Stationmaster, Edinburgh (Waverley), is retiring on March 20.

Mr. Arthur Wood, Traffic Manager of the Yorkshire Traction Co. Ltd., is retiring, and is being succeeded by Mr. Ronald Coutts, Assistant Traffic Manager.

Mr. W. R. Berry, Chief Development Engineer to Jonas Woodhead & Sons Ltd., has been appointed a Director of Ibbotson Bros. & Co. Ltd., in succession to the late Mr. T. H. Sanders.

Mr. J. D. Carmichael, Managing Director of Carmichael Brothers Limited, South Shields, who has been President of the National Ironfounding Employers' Federation for the past four years, has been re-elected for a further term of office.

Mr. Henry T. Dutfeld, Chairman of the Road Haulage Association, has been elected Chairman of the National Road Transport Federation. Colonel Arthur Jerrett, Chairman of the Traders' Road Transport Association, has been elected Vice-Chairman of the Federation.

INSTITUTION OF MECHANICAL ENGINEERS

Among those recently elected to membership of the Institution of Mechanical Engineers is Mr. A. W. Berry, Director of the British Engineers' Association. Those recently elected to associate membership include Messrs. T. C. Ball, Aldenham Railway Depot, L.P.T.B.; F. B. Clark, Chief Mechanical Engineer's Department, Darlington, L.N.E.R.; G. Clayton, Generating Station, Lots Road, Chelsea, L.P.T.B.; P. L. Cleary, Works Manager, Inchicore, Irish Transport Company (formerly Great Southern Railways); R. Ellis, Assistant Chief Draughtsman, Andrew Barclay Sons & Co. Ltd.; Lt.-Colonel R. E. Hagley, Assistant to Works Superintendent, Carriage & Wagon Maintenance, Wolverton, L.M.S.R.; and G. Notcutt, South African Railways & Harbours. Mr. O. S. Nock, Westinghouse Brake & Signal Co. Ltd., has been transferred from associate membership to membership.



Viscount Portal

Appointed Chairman, Great Western Railway Company

Charles Hambro recently intimated that, in consequence of other commitments, he would be unable to continue to act as Chairman of the Great Western Railway Company, but would retain his seat on the board, the directors invited Lord Portal to fill the office of Chairman; and after the general meeting of the company on March 7 it was announced that he had been appointed to that position. Lord Portal was born on April 9, 1885, the eldest son of the late Sir W. W. Portal, 2nd Baronet, and was educated at Eton and at Christ Church, Oxford. During the last war he served with the Life Guards; he won the D.S.O. at Passchendaele. Lord Portal has held a number of public offices. He was an additional Parliamentary Secretary to the Ministry of Supply from 1940 to 1942, and was Minister of Works from 1942 to 1944. Before joining the Government he was on the boards of several public companies, and was Managing Director of Portals Limited, which manufactures paper for Bank of England notes. He was created a Baron in 1935, and a Viscount in the recent New Year Honours List.

SHORT BROS. (ROCHESTER & BEDFORD) LTD.

It was announced recently that the Minister of Aircraft Production had decided to accede to the request of Sir Frederick Heaton for the release of himself and his colleagues from their duties as directors of Short Bros. (Rochester & Bedford) Ltd. The resignations of the existing directors (Sir Frederick Heaton, Chairman; Lord Ashfield; Mr. W. Bramham; Sir Nigel Campbell; Mr. P. G. Stone Clark; and Mr. A. J. Romer) have accordingly been accepted. Reference to the appointments of the above-mentioned directors was made in our April 9, 1943, issue. A new board has been appointed as follows: Mr. E. D. A. Herbert (Chairman), Mr. S. H. Brown, Sir John Buchanan, Mr. C. P. T. Lipscomb, Mr. H. J. L. Parker, and Mr. D. E. Wiseman. In thanking Sir Frederick Heaton and his colleagues for their services to the country, the Minister has expressed his great appreciation of the excellent work they have done in re-organising Short Bros. (Rochester & Bedford) Ltd.

Mr. J. W. Henderson, who, as recorded in our March 9 issue, is retiring from the position of Divisional Superintendent, Quetta, North Western Railway, India, was born in 1893, and was educated at Cheltenham College. He joined the N.W.R. as a probationary Assistant Traffic Superintendent in 1912, and from 1916-18 was Officer-in-Charge, Aden Railways. Other posts held by him have been Railway Concentration Officer, Army Headquarters in India; and Divisional Personnel and Divisional Transportation Officer. He became Divisional Superintendent in 1940.

Khan Bahadur Abdul Latif Sheik, B.A., B.Sc., A.M.Inst.C.E., who, as recorded in our March 9 issue, is retiring from the position of Deputy Chief Engineer (M.), North Western Railway, India, was born in 1888, and took his B.A. degree at the Punjab University, and his B.Sc. degree at Edinburgh University in 1912. He joined the N.W.R. in 1916 as an Assistant Engineer, and subsequently became an Executive Engineer and Divisional Personnel Officer in various divisions before becoming Deputy Chief Engineer.

We regret to record the death on January 3, at the age of 57, of Mr. John L. Beven, President of the Illinois Central System. He joined that railway when he was 12 years old, as a messenger. After holding various positions he became Superintendent, New Orleans Terminal Division in 1917. In 1918 he became Special Assistant to the Regional Director of the United States Railroad Administration at Atlanta, Georgia, and later at Philadelphia. In 1919 Mr. Beven was appointed Assistant to the Federal Manager of the Illinois Central at Chicago, and in 1920, after the railways had been returned to private operation, he became Assistant to the Senior Vice-President. Three years later he was appointed Assistant to the President; in 1925, Vice-President; and in 1931, Senior Vice-President. Mr. Beven was elected President in December, 1938.

Prof. Tigran S. Khachaturov, who has contributed the article on the "Organisation and Development of Railway Transport in the U.S.S.R.," which we publish elsewhere in this issue, was born in Moscow in 1906. In 1926 he graduated from the Moscow State University, and, after some years of practical work dealing with railway economics, became a lecturer on the economics of transport at the Moscow University, and later at the Moscow Institute of Railway Electrical & Mechanical Engineers. In 1939 he submitted his dissertation "Allocation of Transports" to the Academy of Sciences of the U.S.S.R., and



Professor T. S. Khachaturov

Whose article on the "Organisation and Development of Railway Transport in the U.S.S.R." appears on another page

won the degree of Doctor of Sciences (Economics). A year later he received the scientific qualification of professor. In 1941 he became Chief of the Economic Department of the Institute of Railway Scientific Research, and in 1943-44 was a Deputy Director of that Institute. In 1943 he was elected corresponding-member of the Academy of Sciences of the U.S.S.R. Since 1926 Prof. Khachaturov has published more than 40 scientific works, including "Allocation of Transports" (1939) and "Ways of Development of Transport of the U.S.S.R." (1941). Prof. Khachaturov has been awarded the Order of the Red Banner of Labour and the Medal for Labour Valour by the Government of the U.S.S.R.

We regret to record the death on March 9, at the age of 81, of Sir George William Humphreys, K.B.E., T.D., M.Inst.C.E., who was Chief Engineer to the London County Council from 1912 to 1930, and President of the Institution of

Civil Engineers for 1930-31. He held the rank of Colonel in the Engineer & Railway Staff Corps R.E. (T.A.); he resigned his commission in 1938, and retained his rank

The directors of the Gloucester Railway Carriage & Wagon Co. Ltd. have appointed Mr. F. W. Sinclair (formerly of the Crown Agents for the Colonies) to be Chief Designer, and Mr. W. E. Fry to be Chief Draughtsman, in place of Mr. W. G. Brown, who retired on account of ill-health.

INDIAN RAILWAY STAFF CHANGES

Mr. R. Proudlock, of the N.W.R., on return from leave, has proceeded to the Railway Board, to officiate as Director, Traffic (General), vice Khan Bahadur Z. H. Khan.

Mr. W. G. W. Reid, Chief Mechanical Engineer, M.S.M.R., on release from duty with the Depreciation Fund Committee, has been appointed as an Officer on Special Duty with the Railway Board.

Mr. A. A. Phillips, V.D., has been permitted to retire from the Indian State Railways service as from October 21 last, but has subsequently been appointed Chief Controller of Railway Priorities in the Department of War Transport.

Mr. F. G. Griffith, O.B.E., E.D., Divisional Superintendent, N.W.R. (at present Regional Controller of Railway Priorities, War Transport Department), has been permitted to retire from the State Railways service as from November 23 last.

Khan Bahadur Q. Z. Hussain has been confirmed permanently as Chief Engineer, B.A.R.

Messrs. F. E. Musgrave and B. N. Chopra have been confirmed as Deputy Chief Engineers, B.A.R.

Mr. F. Thomas, Officiating Controller of Stores, B.B.C.I.R., has been permitted to retire from the permanent service, but has been re-employed in a temporary capacity as Deputy Controller of Stores.

Mr. C. E. Fischer has been confirmed permanently as Deputy Chief Engineer, B.B.C.I.R.

Lt.-Colonel G. St. G. Higginson, Commercial Traffic Manager, B.-N.R., recently returned from special duty with the Indian Railway Conference Association, and reported for duty on that railway.

Messrs. S. J. P. Cambridge, K. Durai, O. R. Tucker and A. G. Stavridi have been confirmed as Divisional Superintendents, E.I.R.

Mr. R. A. Saunders-Jacobs has been appointed to officiate as Deputy Chief Engineer, E.I.R.

Mr. R. J. Earle has been appointed to officiate as Deputy Chief Engineer, E.I.R.

Mr. K. M. Rau has been appointed to officiate as Chief Electrical Engineer, G.I.P.R.

Mr. A. L. Bishop has been appointed to officiate as Controller of Stores, M.S.M.R.

Rai Bahadur P. B. Chandwani, Deputy General Manager (Personnel) N.W.R., has retired, and has been succeeded by Khan Bahadur B. A. Khan.

Rai Bahadur R. P. Varma, Divisional Superintendent, N.W.R., has been permitted to retire from Government service.

Mr. Apjit Singh has been appointed to officiate as Deputy Chief Accounts Officer, N.W.R.

Mr. F. A. de La Nougerede, on transfer from the B.A.R., has been appointed to officiate as Controller of Stores, O.T.R.

TRANSPORT SERVICES AND THE WAR—285

London Bus Conductors as Drivers

Since the beginning of the war the London Passenger Transport Board has trained 2,150 male conductors to be bus drivers. Many of these men have been replaced by women. There are now more than 10,000 women conductors in London Transport service, and a thousand more are still wanted.

Civilian Air Raid Casualties in February

The Ministry of Home Security has announced the following figures of civilian casualties due to enemy air action in the United Kingdom during the month of February:—

Killed (or missing believed killed) ...	483
Injured and detained in hospital ...	1,152

The casualties are classified as follow:—

	Men	Women	Under 16
Killed (or missing believed killed) 151	243	89	
Injured and detained in hospital... 326	639	187	

London and "D"-Day Traffic

It is now permissible to record that London played a large part in launching the "D"-Day armada of invasion ships, and the subsequent build-up at the beachheads and at the prefabricated Port of Arromanches. From the beginning of the operation to August 31, 1944, there were loaded and despatched from the Port of London:—

Personnel of the B.L.A. ...	Over 311,000
Vehicles ...	Over 123,400
General stores, including ammunition ...	Over 666,000 tons.

The accomplishment is all the more remarkable when it is realised that the working of commercial ships in the Port, vital to London's daily food and supplies, was proceeding simultaneously.

The operational task involved loading approximately 2,000 ships—coasters, ocean-going ships, L.S.Ts. (landing ship tanks), and other types.

During the worst period of the day and night flying-bomb assault London dockers worked enthusiastically handling astonishing tonnages daily to keep pace with the finely-cut timetable. This was essential, apart from other considerations, to avoid congestion on the railways and at the exchange sidings, as the bulk of the war supplies and materials poured into the docks on the railways from all over the country. During the period to August 31, 1944, 62,000 wagons were dealt with. Normally, barge and road transport are primarily concerned with the movement of traffic to and from the Port of London, so that the big switch to movement in by rail presented special problems, which were met successfully by the Port of London Authority's railway department.

Simultaneously, the Port was completing the construction and despatch of many of the units destined to form the prefabricated Port of Arromanches, of which London was responsible for 75 per cent. of the concrete construction work.

Two L.M.S.R. lines running through the heart of London, one 8½ and the other 10½ miles long, played a major part in the transport of men and material to the Thameside Docks. For a month before "D"-Day, unknown to the thousands of City workers who daily use the lines, 296 train loads of men, tanks, ammunition, petrol, and stores were sandwiched in among the heavy traffic normally carried to the shipsides at the London Docks. The number of wagons hauled totalled no fewer than 9,294. To ensure smooth running of this secret traffic, which converged upon

these two short stretches of track from 41 different points, ten traffic controllers were drafted into the area to supplement the existing staff. They had at their disposal a special "D"-Day force of locomotives, drivers, and firemen, collected from other parts of the country. On the heaviest day 23 special invasion trains were worked on these already congested lines. At the same time thousands of wagons were pouring into the Docks by the regular freight services.

The two lines, in the normal way, carry a heavy volume of both passenger and freight service, this includes:—

Freight trains to L.M.S.R. London goods depots.
Freight traffic passing between two different sections of the L.M.S.R.
Steam passenger services operated over part of the route.

Part of the route also takes all the passenger and freight traffic on one of the main L.M.S.R. lines out of London.

Ministry of Traffic & Power for German-Occupied Holland

In accordance with a Decree issued on August 10, 1944, by the German Reich Commissar for the Occupied Dutch Territories, all affairs in those territories concerning transport and traffic, including railways and tramways, roads, inland shipping, maritime shipping, air communications, and electricity, gas, and water supply, have been separated from the Waterstat Ministry, in which they were concentrated until then, and transferred to a newly-formed Ministry of Traffic & Power. Jr. van Dieren, a Rotterdam shipbuilder, was appointed General Secretary to the new Ministry. In accordance with the practice of the Germans in Occupied Holland, no Minister has been appointed. None of the other German-sponsored "Ministries" in Holland is headed by a Minister.

State Administrator for Paris Métro

A Government-appointed state administrator has been placed at the head of the Compagnie du Chemin de Fer Métropolitain, Paris. A special committee is to assist the new administrator in an advisory capacity. This is stated to be the outcome of accusations made by the Resistance Movement that the Métro management had "collaborated" with the German occupation authorities, particularly by deporting French workers to Germany. These accusations, which were also levelled against the Métro management by the Constituent Assembly, have been extended to the whole Empain group of which the Métro Company is a member. The Chairman of the group, Baron Jean Empain, is reported to have left for Spain. The Paris Committee of Liberation is said to have asked the Government to investigate the whole affair, and a special committee of enquiry has been set up. Pending further action, it was decided to replace the Métro management by a Government-appointed administrator until the whole matter is cleared up.

"Emergency Consignees" in Germany

A Decree issued by the Reich Minister for Armaments & War Production on January 18, when the German full-scale retreat in Poland had already begun, contains new regulations designed to avoid the congestion on the railways caused through inability to deliver goods to their consignees. In accordance with the new provisions, consignments of certain categories of goods will not be returned to the original consignor but, with a view to saving transport, will

be delivered to "emergency consignees" (*Notempfänger*) for disposal either locally or otherwise. The main categories of goods which the Reichsbahn is now entitled to hand over to other consignees without previously obtaining the consignor's approval or authorisation comprise commodities in bulk, building materials, timber, horticultural and agricultural products, and all perishable goods. Machines, technical equipment of any kind, semi-manufactured articles, and materials are excluded. Emergency consignees for the reception of armaments must be nominated by Army Offices; those intended for the reception of civilian goods must be specified by Provincial Economic Offices (*Landeswirtschaftsämter*); and those to receive consignments of foodstuffs by Food Offices (*Ernährungsämter*). Emergency consignees for building materials are appointed by the Organisation Todt.

The Tripoli Military Railway

Part of the ex-Italian State Railway system radiating from Tripoli (Libya) was re-opened to the public on June 1, 1944, as the Tripoli Military Railway, under the supervision of Royal Engineer personnel of the Directorate of Transportation, Middle East Forces.

The advertised public service offers two mixed steam trains and one diesel railcar each way a day between Tripoli and Zauia (47 km.); and two mixed steam trains and two diesel railcar services on market days, twice a week, between Tripoli and Azizia (50 km.). The latter route also carries limited mixed accommodation on scheduled freight trains of military stone traffic. All services are advertised as subject to the exigencies of military traffic. Response from the local community has been good, in that passenger tickets sold rose from 3,223 a month in June to 28,315 in October; fares are based on 1 M.A. Lire (= 1d.) a km. in the lowest class accommodation.

Merchandise traffic, other than accompanied smalls, has been conspicuously lacking, no doubt because road transport competes strongly on so short a haul, and commercial import and export traffic passing through the port of Tripoli has not yet been revived to any great extent.

The Tripoli Railway, of 95 cm. gauge, and its plant and rolling stock were extensively demolished by the Axis Forces immediately before the British occupation in January, 1943. By mid-February, however, R.E. Railway Detachments had effected sufficient repairs for W.D. freight traffic to be worked to and from the docks and dispersal areas outside the city. Later, two steam locomotives and additional rolling stock were ferried from the Benghazi Railway. A strategic conversion to metre gauge was effected between Bivio Ghiran (12 km.) and the original western terminus at Zuara (118 km.); at the same time the track from km. 60 southward to the terminus at Vertice 31 (for Garian, 89 km.) was lifted with a view to strategic extension on metre gauge with this material into Tunisia. These works were undertaken by the South African Engineer Corps, but were suspended on the full reopening of the Mediterranean Sea lanes.

Motive power is represented by steam locomotives of 0-8-0 and 2-6-0 wheel arrangement, together with one Fiat diesel-mechanical railcar and two Fiat diesel-electric shunters. Maintenance provides something of a problem, as the workshops have not been fully re-equipped after the demolition of essential machinery.

By the end of 1943, the metre-gauge track from Bivio Ghiran to Zauia (47 km.) had been reconverted by local labour to

its original state. All curves were moved in to 96.97 cm. first, and it is of interest to note that military freight traffic was worked successfully over metre-gauge straight sections with 95 cm. locomotives and stock while reconversion was still in progress. The railways of Tripoli were described (with map) in our issue of August 22, 1941 (page 193).

The Yang-tze Train Ferry

Within the last week or two American bombers based in China are reported to have selected as a target the train-ferry connecting Nanking with Pukow across the Yang-tze Kiang. The present ferry is a Japanese installation, as the original ferry steamer—together with the girder aprons of the inclined approaches and the electrical gear—steamed away upstream to safety before the invading Japanese could capture it when Nanking fell in 1937. No details are available of the Japanese ferry, but presumably it differs little from the Chinese vessel; as the bulk of the riverside equipment is probably again in use by the invaders and the ferry would have to suit its requirements. It is known, however, that it took the Japanese some time to replace this ferry, despite the fact that it forms a vital link in their lines of communication, being an integral part of the main line from Shanghai to Peiping.

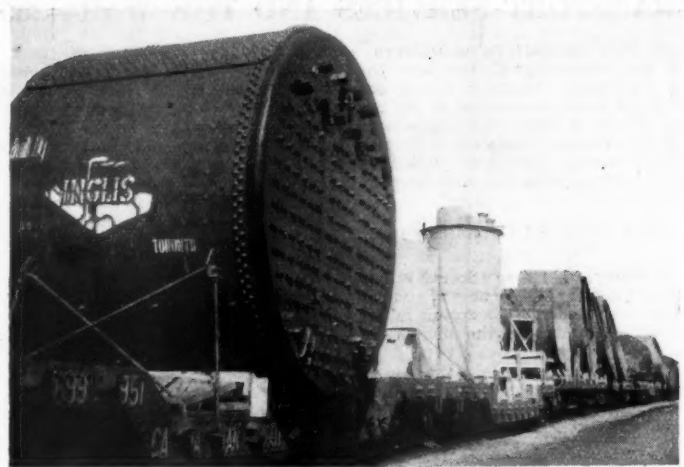
Some details of the original installation may be of interest. The river at this point is some 3,500 ft. in width and has a maximum depth of over 150 ft., but more important is the fact that there is a seasonal rise and fall in the water level of 24 ft. To allow for this variation, the ferry is approached by an adjustable bridge consisting of four spans each 150 ft. in length. The shoreward end of this 600-ft. bridge is anchored so that rail level is 12 ft. above minimum and 12 ft. below maximum ferry deck or track level. The incline of the bridge, with its maximum gradient of 1 in 25, is adjusted by the suspension of the ends of the spans by nickel-steel screws operated by electric motors situated on the tops of the pier towers. The three shoreward spans have a single line, which splits out into three tracks on the riverward span to suit the three-track ferry steamer.

A special feature of the Chinese ferry was that it carried a powerful shunting engine to and fro, which pushed the wagons or coaches on one of the three tracks on the ferry across the approach bridge and returned with another rake. The engine was then moved over to the second line by means of a traverser to repeat the operation, and then to the third. Loading and unloading was completed in about 15 min. This ferry worked satisfactorily and without accident during the four years it was in service from 1933 to 1937.

Moving American Wounded by Train

The movement of wounded men in the United States is under the control of a Hospital Evacuation Unit of the Passenger Branch, Traffic Control Division, Army Transportation Corps. For this purpose liaison is maintained with the Office of the Surgeon-General of the Army as to the arrival of hospital ships. At the ports there are debarkation hospitals to which the wounded are transferred from the ships, generally by ambulance or motorbus, and from the debarkation hospitals, after classification, they are sent by train to hospitals inland.

The Hospital Evacuation Unit has exclusive control of 120 hospital cars and 40 hospital kitchen cars, mostly converted from standard stock, which are now running 300,000 miles a month, and is shortly to receive 100 new combined hospital and kitchen cars of an up-to-date design. The



During the war the Canadian National Railways have been required to handle ever increasing shipments of bulky out-of-gauge loads. This recent view shows a portion of a train of war supplies carrying such loads on crocodile wagons. These shipments move only during daylight and at a restricted speed limit

sitting-up cases travel in air-conditioned coaches, on expedited schedules, with adequate messing facilities.

Before the special hospital stock became available, it was arranged that wounded men should have first priority in the use of sleeping berths in ordinary services, even if this required the removal of sleeping cars from regular service, or the eviction of passengers from booked accommodation, but the arrangements in general have worked so well that there has been little or no necessity to take such drastic measures, and no scheduled sleeping car services have been cancelled. Block hospital trains are dispatched from the ports to diversion points, where they are split up, and, on the return journey, reassembled to carry the nursing personnel back to the ports. Each general hospital has a permanent railway representative to supervise the return arrangements, and otherwise to co-operate with the transport officer.

Railway Troop Movements in the U.S.A.

Details have been made public recently of the methods adopted by American railways in handling movements of troops and wounded in the United States, in which there has been smooth and efficient co-operation between the Traffic Control Division of the Army Transportation Corps, or "T.C.D.," and the railway operating authorities. In 19 months from the entry of the U.S.A. into the war, 21,754,305 troops were handled in organised movements, compared with 8,874,708 in the 19 months during which the U.S.A. was involved in the First World War. Up to October 1, 1944, the total handled in this war had risen to 25,750,000 persons; the volume of the traffic has been running lately at about 800,000 monthly, compared with peak figures as high as 900,000 to 1,000,000 a month in 1943.

A pool of Pullman sleepers is used for troop movements, including the 1,200 troop sleeping cars specifically built for this purpose by the Pullman-Standard Car Manufacturing Company. In a standard sleeper, by assigning two men to each lower berth and one to each upper, 39 can be accommodated. A special car conservation plan was worked out by T.C.D., on the basis of reducing empty car mileage to a minimum by seeing that each inward released car is

used as far as possible for an outward movement from the same station or locality. It is calculated that from November, 1942, to September, 1944, there was a saving of 25,500 sleeping car movements, 890,000 men thus having berths who would otherwise have been required to travel sitting up in coaches.

When a division is to be moved, T.C.D. is usually given 30 to 90 days' notice, and thereupon assigns an officer to preside over a meeting attended by the Army's local transport officer, and representatives of the railways concerned, the Pullman Company, and the Association of American Railroads. The movement is then mapped out, including routes, schedules, train formations, and so on. For smaller movements, T.C.D. requires 72 hr. notice from local transport officers; and the railways are given almost unlimited authority to consolidate these movements in such a way as to economise as far as possible in motive power, rolling stock, and train crews. It should be added that the total troop movement figures quoted are exclusive of small drafts of fewer than 40 men, or individual movements of military personnel on furlough.

An Acute Tank Wagon Shortage in U.S.A.

A communication has been made by Colonel J. Monroe Johnson, Director of the United States Office of Defense Transportation, calling on railways, Government agencies, and industrial organisations to do their utmost to promote the more economical and efficient use of oil-tank wagons, of which there is a shortage estimated at 15,000 of these vehicles. Major changes have taken place in the petroleum situation, due to the withdrawal of tankers from coastal sea routes, and the greater demands made by the War and Navy Departments, which are particularly urged to secure a faster turn-round time for tank wagons by releasing them as quickly as possible. It is important that the tank wagon supply shall be conserved for the longer hauls, and for this reason a permit is required from the O.D.T. for any movement of oil in tank wagons over a distance less than 200 miles, which is given only in cases of proven urgency. It is urged by Colonel Johnson on all concerned that, by shift working, a 24-hr. day and a 7-day week shall be worked in handling oil tank movements and oil deliveries.

Great Western Railway Company

Change in chairmanship—Lord Portal to succeed Sir Charles Hambro—Board changes—Financial results—Railway Control Agreement—Passenger and freight traffic—Works schemes—Post-war policy—Fares, rates and charges—Air plans—Tribute to staff

The annual general meeting of the Great Western Railway Company was held on March 8 at the Great Western Railway Hotel, Paddington Station, W. Sir Charles J. Hambro, K.B.E., M.C., Chairman of the company, presided. The Secretary, Mr. F. R. E. Davies, C.B.E., having read the notice convening the meeting,

The Chairman said: Before I deal with our formal business there is a personal matter on which I wish to make some observations. Four years ago, when I acceded to the wishes of the board that I should become the Chairman of the company on the lamented death of Lord Horne, I had no reason to contemplate that my outside interests would take up so much of my time, nor did I anticipate the extent of the calls on my services in connection with the country's war effort. This is not the moment for me to enter into details of the missions which I have undertaken on behalf of His Majesty's Government, but on more than one occasion they have necessitated my enforced absence from this country for lengthy periods. Thanks, however, to the co-operation of my colleagues on the board, your interests have been adequately safeguarded during my absence, but post-war and other vital matters affecting transport are becoming increasingly important every day and are likely to become even more so in the future. They demand the unremitting attention of the Chairman, and I have felt that, in view of my other commitments, which will almost certainly increase, as they are associated with post-war problems, it would be better for the chairmanship to be in other hands as soon as this could conveniently be arranged.

My return from the United States of America at the end of last year coincided with the re-election to the board of Lord Portal, and it gave me the opportunity of discussing with my colleagues the anxieties which I felt and the best means of meeting the circumstances which had arisen. We were unanimous in agreeing that if Lord Portal could be persuaded to take over the Chairmanship of the company this would be a happy solution, in view of his knowledge of the company's affairs and his outstanding record of public service and achievements in other spheres. I am glad to say that Lord Portal has intimated his willingness to take my place as Chairman, and the change will be made effective this month. It is hardly necessary for me to assure you that I have come to my decision with regret, but I am confident that it is the right one in the company's interests.

I shall still remain a director of the company, and you may be assured that I shall continue to give the board all the support which lies in my power. I should like to take this opportunity of thanking Lord Portal for his co-operation in dealing with a situation which would not have arisen but for the war, and you, ladies and gentlemen, for the indulgence which you have extended to me whilst I have had the privilege of occupying this chair.

There have been several changes on the board during the past year. We have lost by death the Rt. Hon. Lord Davies and the Rt. Hon. Lord Somers, and, in addition, two directors of long standing have retired. I refer to Sir Henry

Robertson and the Rt. Hon. Lord Mildmay of Flete. With the exception of Lord Somers, who was with us for only a short time before his death, all these gentlemen were members of the board for a great many years, and all had rendered inestimable service to the company. The loss of their wise counsels will be keenly felt by the directors, officers and staff alike.

In addition to the re-election of the Rt. Hon. Lord Portal, which I have already mentioned, the board has co-opted Mr. W. M. Codrington, M.C., who was previously a member of the Audit Committee, Captain Hugh Vivian, and Sir William Fraser, C.B.E., who all have wide industrial associations.

There has also been one notable change amongst our principal officers during the year. Mr. W. J. Thomas, the Chief Docks Manager since 1936, has retired after filling several important positions in connection with our Marine and Dock activities, in all of which he rendered splendid service, particularly since the outbreak of the present war. He has been succeeded by Mr. L. E. Ford, who was formerly the Assistant Chief Docks Manager.

Financial Results

Turning now to the annual accounts, there are only one or two items which call for special comment from me. The bulk of our net revenue consists of the fixed annual payment due to us under the Railway Control Agreement, including our proportion of net revenue from joint lines, and, with the addition of miscellaneous receipts from sources outside the control agreement, the total net revenue amounts to £6,940,129. This is virtually the same as for the previous year and after taking into account the balance brought forward, it enables us to maintain the dividend on the consolidated ordinary stock at 4½ per cent. for the year, with an increase of £18,522 in the amount carried forward. The credit of £206,698 in the capital account arises in connection with the expiration of the remaining agreements with colliery companies for the letting to them on redemption hire terms of the five thousand 20-ton wagons which we purchased about 10 years ago. This item has now disappeared from the capital account and the arrangement has been a beneficial one for all parties concerned. The contingency fund remains at the same figure as last year, namely, £4,548,725, and, as the proprietors are aware, it is an entirely free reserve available for such purposes as we think fit.

Our investments in Government and similar securities amount approximately to £17½ millions and their book value at December 31, 1944, was below the market price on that date. The securities are all redeemable at fixed dates. Our outstanding traffic accounts at December 31, 1944, amounted to £6,783,460, and in spite of the largely increased traffics, they show a gratifying decline of some £200,000 as compared with the previous year.

Under the provisions of the Railway Control Agreement in regard to maintenance and renewals, we are entitled to charge each year against the net revenue of the pool a sum calculated by reference to the average amount charged in our

accounts for the years 1935, 1936, and 1937, in respect of the maintenance and renewal of all our maintainable assets of every description. This figure is subject to adjustment in respect of any variation in such assets, and to such addition as may be necessary from time to time to meet increased costs by reason of increases of rates of wages and in price levels. The total charge thus calculated is utilised to meet current expenditure on maintenance and renewal, and the balance unexpended is paid into the G.W.R. trust fund which was set up under the control agreement. The fund now stands at £16,400,783, which is an increase of about £4,700,000 over the previous year. The payments into the fund, whilst they do not include any allowance for the making good of abnormal wear and tear, are based on the latest known price levels; that is to say, the total payments to the fund for the whole period of control to the end of last year are calculated on the 1944 wage rates and material prices. As I have explained before, the fund accumulates at interest, and the Railway Control Agreement provides that after the end of control the company shall receive payment from the fund in respect of the accumulated arrears of maintenance in four instalments. Many highly technical and complicated questions arise in determining the final amount which will be due to the company, but the first instalment will be in respect of arrears at base period values and be payable six months after the end of control.

Railway Control Agreement

At our meeting last year the Deputy-Chairman, Sir Edward Cadogan, undertook to consult the Chairmen of the other main-line companies in regard to the request made by the proprietors at the meeting that the railway boards should convey to the Minister of War Transport their view that the Railway Control Agreement was inequitable in its operation and should be revised. Following this consultation, the Chairmen had an interview with the Minister on April 20, at which they submitted a memorandum requesting an adjustment of the agreement in two directions, namely:—

- (1) The guaranteed annual payment should be increased.
- (2) The basic figure for maintenance should be adjusted to cover the intensified use of maintainable assets.

The memorandum submitted by the Chairmen, together with the Minister's reply, has already been published in the press, and all I need say now is that the Minister declined to entertain any increase in the annual payment, but indicated his willingness to consider whether any allowance could be made under the provisions of the Agreement relating to abnormal wear and tear.

These provisions are contained in Article 11 of the Railway Control Agreement of May 29, 1942, which limits the charge for maintenance, except in so far as the Minister may agree to the inclusion of an allowance in respect of wear and tear which is shown by the undertaking to be abnormal as compared with the base period. As the result of the discussions which have taken place—in the course of which it has been shown that a substantial amount of abnormal wear and tear of certain railway assets has accrued up to date—the Minister has intimated that he will be prepared to make an allowance in respect of such net amount of abnormal wear and tear as

shall be shown to his satisfaction to have accrued over the whole period of control. The proprietors will appreciate that the ascertainment of the extent to which abnormal and subnormal wear and tear has taken place is a difficult and complex problem which cannot be finally resolved until the end of control. Meanwhile, we are glad to know that the Minister is satisfied that a substantial amount of abnormal wear and tear has already accrued after taking subnormal wear and tear in respect of other assets into account, and that he will be prepared to make an appropriate allowance at the end of control for any balance of abnormal wear and tear which may then be shown to exist.

Staff Matters

In March, 1944, applications were made by the three railwaymen's trade unions and the employee's sides of the Railway Shopmen's National Council and National Railway Electrical Council for a further general increase of 12s. per week in salaries and wages. The claims were settled by agreement with the unions, and with the authority of the Ministry of War Transport, on the basis of an increase of 5s. a week in the war advance for all adult male and female staff, with a proportionate increase for juniors. This brings the total war advance at present payable to adult male staff to 25s. 6d. per week, or £66 6s. a year, and 21s. 6d. a week to adult female staff.

The total number of members of our staff who are serving in His Majesty's Forces, or whole-time in Civil Defence, is now over 15,000. The casualties of which notification has been received include 444 killed in action or died of wounds or disease, 155 reported missing and 271 prisoners of war or interned in neutral countries. Ten members of the Great Western staff were included among the prisoners of war repatriated from Germany in September and October last. Close contact has been maintained with these men, some of whom are still receiving hospital treatment, and arrangements have been made for their return to railway employment as soon as they are fit to do so.

Incidentally, you may like to know that our Comforts Fund, which is largely maintained by contributions from the staff, has been instrumental in despatching nearly 100,000 parcels to our men who are serving with H.M. Forces.

During the year seven members of our staff were killed in this country and 43 injured, as a result of enemy action. Our deepest sympathy goes out to the relatives of all who have made the supreme sacrifice abroad and at home and also to those whose health is impaired as a consequence of war service.

A number of decorations for bravery and awards for meritorious service have been gained by our employees on active service. Others have been awarded for services rendered in their civilian capacity or in connection with the Home Guard, in which nearly 16,000 of our men were serving when the order to stand down was received in December last. A complete record of the honours gained by our men in the Forces is not yet available, but since the commencement of hostilities the awards to our staff for other services are as follows:—

George Cross	...	...	1
C.B.E.	...	...	1
O.B.E.	...	...	4
M.B.E.	...	...	21
George Medal	...	...	7
British Empire Medal	...	...	55
Commendation	...	...	24

Preliminary steps have already been taken to ensure the speedy re-instatement in the company's employment, as soon as they are demobilised, of our staff with the Colours, and a communication has been sent to all with whom it is practicable to make contact telling them that we look forward to the time when those who have served the country so well in other spheres are able to return to their pre-war occupation, and assuring them of the welcome they so richly deserve. Every member of the staff will be interviewed on his return by a responsible officer in order to ensure the best use being made of his services.

Passenger and Freight Traffic

Although it is not yet possible to give any comprehensive account of our war-time activities, there can be no doubt that the services rendered by the railways have contributed in no small measure to the success of the country's war effort. The Great Western Company has borne its full share of the burden which has fallen upon the railways and the proprietors will be interested to know that all previous records were again broken last year when the company dealt with the greatest volume of passenger and freight train traffic in its history.

The number of passengers originating on the company's system during the past year, excluding season-ticket holders, was nearly 60 millions, or 64 per cent. more than in 1938 and 28 per cent. in excess of the record pre-war year of 1923. Notwithstanding the great increase in the numbers carried and the fact that passengers travelled a much greater average distance, fewer trains were run than in any previous year of the war, and compared with 1938 the total passenger train mileage was nearly 10 millions, or 23 per cent., less. The priority which necessarily had to be given to the conveyance of essential traffics, together with the general shortage of locomotives and staff, unfortunately precluded us from providing an adequate or satisfactory service for this unprecedented passenger traffic. To accommodate the passengers, most of our trains had to be strengthened with additional coaches, and the heavier loads not only imposed a severe strain on the locomotives but affected adversely the general timekeeping of the trains. In many cases the provision of additional coaches made the trains too long to be dealt with at the existing platforms without drawing up a second time and, as most of the long-distance trains were generally overcrowded, they could not be dealt with by the limited and to some extent inexperienced station staff within the scheduled time normally allowed.

At holiday periods our difficulties were further accentuated by the restrictions imposed by the Minister of War Transport so as to ensure that there would be no interference with the working of essential traffics. Our passenger traffic during the week preceding last Christmas exceeded all previous records and, although we were prohibited from running more long-distance trains on any one day than were run on an ordinary weekday in December, 1943, we actually carried on Friday, December 23, our heaviest day, 26,000 more passengers from Paddington on long-distance trains than on the peak day of the previous Christmas period.

In circumstances such as these it is inevitable that many passengers must suffer considerable inconvenience and delays, and I can only express my regret that we are unable to provide an adequate service for all demands and assure

those who suffer discomfort that we make every endeavour to meet their requirements to the best of our ability.

With regard to freight traffic, the number of loaded-wagon miles run over the company's system last year exceeded those run in any previous year. The essential ton-mileage of merchandise traffic was more than double that of 1938, and, while in the case of coal traffic a decline of some thirteen million tons in coal exports from South Wales was only partly offset by increased carryings to inland destinations, the estimated net ton-miles worked were approximately the same, due to the increased distance the traffic had to be conveyed. In this connection, the proprietors may be interested to learn that so far as South Wales is concerned the tonnage of coal lost in production as a result of shortage of wagons or other transport difficulties, was negligible, being only 170 tons for the whole of the year.

The difficulties experienced in working both passenger and freight trains are attributable mainly to the general shortage of labour. During the early years of the war, our locomotives and carriage works were extensively engaged on munition work of all descriptions, including pom-pom guns, complicated gun mountings, axles and brake gear for the 25-lb. field gun, bullet-proof plates and turret rings for armoured cars, driving flanges, Rackham clutches, and plates for tanks, motor landing craft, aeroplane parts, searchlight projectors, shells, bombs, etc. This work had to be given priority over the construction of new locomotives and carriages, and to enable us to meet the traffic requirements we had to keep in service many engines which in the normal course would have been condemned, and also obtain a temporary loan of American engines, since withdrawn for use overseas. The reconditioning of worn-out engines and alterations to the American engines imposed a heavy burden on our repair staff, which was further accentuated by an increase in engine-hours in traffic of 21 per cent. since 1938. Unfortunately, it has proved to be quite impossible to obtain the additional labour necessary for the proper upkeep of rolling stock, and the cumulative effect of longer hours in traffic, heavier loads and inadequate staff to repair and service our locomotives properly, has had a marked effect on their general condition which is adversely affecting our working. The position in regard to passenger carriages is very similar; no additional vehicles have been constructed during the war years and our stock of passenger-carrying vehicles is at present less than at the outbreak of war, with a much higher percentage under or awaiting repair than we have ever had before.

The outstanding event of the past year was the re-entry of the Allied Forces into France on "D" Day, June 6. Long before that date the railway companies were called on to deal with an enormous volume of Government traffic of all descriptions. Imports from America were largely increased, and the assembly of the Allied Forces with their vast equipment, ready for shipment at various points in accordance with scheduled arrangements, was a task which called for the highest skill in organisation and the closest co-operation of all concerned. In our South Wales ports alone, 158 vessels had to be loaded and got ready to sail on the appointed date, and throughout the line many thousands of wagons with equipment and stores had to

be accumulated in readiness for shipments both before and after "D" Day. Altogether more than 34,000 special trains conveying personnel and equipment were run over the Great Western system during the year, but during each of the two weeks immediately following "D" Day over 1,000 special trains were run, and this number increased to a maximum of 1,131 during one week in July, the highest number run on any one day being 196.

Works Schemes

I can now reveal that consequent on the alteration in the flow of traffic caused by the necessity to divert as much shipping as possible from London, the East Coast and Southern ports, and the additional demands of wartime traffic generally, it was necessary for the company to undertake very important works on behalf of the Ministry of War Transport, such as the duplication and quadrupling of lines, improvement in locomotive facilities, construction of refuge sidings, conversion of refuge sidings into running loops, and the consequent provision of the necessary signalling facilities. Some idea of the work involved may be gathered from the fact that we carried out on behalf of the Ministry of War Transport over 400 works schemes involving an expenditure of nearly £5 millions; over 600 schemes for other Government Departments costing about £2 millions, and a further 94 schemes for additional facilities at the South Wales docks costing nearly £1 million, making a total on behalf of His Majesty's Government of about £8 millions. Also 57 can-tees have been provided to assist the staff in overcoming difficulties in obtaining food whilst on duty, and 20 more are under construction, and a further £1 million was also incurred on works in connection with air raid precautions.

Post-War Policy

The expectation of an early cessation of hostilities brings into prominence the need for an early decision on the question of the future of all forms of internal transport. The proprietors will remember that at our last annual meeting Sir Edward Cadogan referred to the speech made by the Minister of War Transport, the Rt. Hon. Lord Leathers, in October, 1943, when he stated that the financial position of the railways must be firmly established and that the object in view was to co-ordinate and maintain a transport system which will meet the needs of each separate industry or activity and provide the best possible service at the least real cost to the community. Although for many years before the war the financial position of the railways was being steadily and increasingly undermined by unregulated road motor competition, they still have ample resources, and given equality of treatment by Parliament of all forms of internal transport their financial position can be regarded as firmly established.

The achievements of the railways in meeting the unprecedented demands made on them during the war are an eloquent tribute to the efficiency of their organisations and to the high pre-war standard at which their lines and equipment were maintained. If, as I assume, the sole object of any change would be to ensure the most efficient and economic use of all forms of transport in meeting the requirements of users, I would emphasise that, as our record shows, we have hitherto been able to meet all reasonable demands by users and there is no reason for thinking we shall be unable to do so in future. Our view therefore is that the main-line rail-

ways should continue as four separate entities and that co-ordination of all forms of internal transport should be effected in such a way as to secure to users, as far as practicable, a free choice of alternative facilities, with competition on a fair basis. It is along these lines that we are proceeding with our post-war plans. The main problem is to determine the best means of co-ordinating rail and road facilities, but little progress can be achieved in this direction until we know what arrangements are being made to put the road haulage industry on a properly organised basis.

We are not concerned in regard to road hauliers operating purely local services but, in our opinion, co-ordination of competing transport industries cannot be effective until all parties are subject to similar obligations and responsibilities with respect to the provision of reasonable facilities for traders, the regulation of rates, and their application without discrimination between traders and between routes. The whole position is one which is no doubt engaging the attention of the newly-formed National Road Federation, and we have indicated our desire to meet its representatives at the earliest possible date for an exchange of views. Meanwhile I am glad to say that the Road/Rail Conference, set up at the instance of the Transport Advisory Council in 1939, is making good progress with the preliminary work of preparing a common classification of freight traffic, uniform conditions of carriage and new rate structures.

Our discussions with representatives of private-wagon owners and wagon repairers are continuing with a view to reaching agreement as to the best means for securing a greater measure of common user of privately-owned wagons in the coal industry, the extended user of high-capacity wagons, and the adoption of such standardised types of wagons as would best meet the needs of the industry. In considering these matters many complex problems arise because of the diversity of the interests affected and the varying requirements of the coal industry. Changes in the organisation of that industry, and in the arrangements for the merchandising of coal, also may have an important bearing on the whole position, but we hope it will be possible to formulate an agreed policy at an early date.

Improvements Planned

After the cessation of hostilities our first consideration must be the overtaking of the heavy arrears of maintenance which have accumulated during the many years of war. We are anxious not only to restore the pre-war standards of passenger and freight traffic at the earliest possible date but also to introduce many improvements. We have in contemplation a large programme for the construction of new locomotives and carriages over a period of five years and, in carrying out this work, many improvements will be incorporated. Our programme includes new and up-to-date designs, more comfortable carriages with more attractive upholstery and improved lighting, better buffet, dining and sleeping cars, etc., our aim being to provide the public with the finest service in the world.

We have made a comprehensive survey of all stations throughout the system. Practically all of them require extensive repairs and repainting. Many are scheduled for rebuilding and others for modernisation; our intention is to provide more spacious booking halls, more attractive refreshment rooms and better waiting and cloakrooms. We have also had prominently in mind the need for

providing improved messroom accommodation and washing and lavatory facilities for the staff and for assisting them in securing suitable housing accommodation.

With regard to freight traffic, our plans include the restoration and extension of pre-war express train services, the development of the use of containers and of the railhead system of distribution, and, as I have previously mentioned, a greater measure of common user and standardisation of privately-owned wagons. We also attach great importance to adequate contact with manufacturers and traders and our aim must be to provide for their requirements in a mutually satisfactory manner, as the most economic form of transport from the railway viewpoint is not necessarily the most economic for the users.

Consideration is being given to a number of proposals which have been made for major improvements to our docks in South Wales. Two of our steamboats which have been lost by enemy action will also have to be replaced, as well as some of our dredging craft.

The position as to our hotels is very similar. Our hotel at Moretonhamstead has been requisitioned by the Government and, when returned to us, will have to be entirely redecorated before being brought into use. We anticipate a considerable development in tourist and holiday traffic and we are anxious to play our part in providing additional hotel and holiday camp accommodation at popular prices for visitors to localities on our system.

The rapidity with which we can carry out these long-term programmes for new and improved facilities must necessarily depend on our being able to secure an adequate supply of labour and materials in the post-war period, and in view of the fact that so many post-war developments are dependent upon the provision of adequate transport we hope that special arrangements will be made to release the 15,000 members of our staff now serving with His Majesty's Forces at the earliest possible date.

South Wales Traffic

The many new industries which have been established throughout the company's system during the war and those foreshadowed in South Wales under the Distribution of Industry Bill, are likely to lead to a large increase in our traffic. The construction of six Government-sponsored factories in South Wales has already been commenced, and new steel works are projected in connection with the reorganisation of the tinplate industry. The President of the Board of Trade recently announced that new large factories are to be built for the spinning and processing of nylon yarn and the manufacture of watches, and I understand that altogether some 200 enquiries have been received by the Board of Trade Regional Controller for South Wales regarding the establishment of new industries. If it is decided to proceed with the Severn Barrage scheme, further developments may confidently be anticipated. Our main concern is in regard to the future of our coal exports but, as the maintenance of our foreign markets will be of great national importance after the war, we are confident that every effort will be made to restore this trade, and to this end we shall co-operate to the best of our ability.

Rates, Fares, and Charges

The provisions of the Railway Control Agreement provide for the continuance of control for a minimum period of one year

after the cessation of hostilities, and, before it comes to an end, time is to be given for the operation of any statutory machinery governing the level of rates, fares and charges. The Parliamentary Secretary to the Minister of War Transport recently stated in the House of Commons that control was more likely to continue for two years than one, and, in view of the difficulty which is likely to be experienced in fixing the level of charges under post-war conditions and in dealing with other problems, I am afraid we can hardly hope for its termination at an earlier date. The post-war level of charges, of course, will depend on the company's traffics and costs, and these are obviously matters for speculation. The present earnings of the railways do not afford any guide to the probable post-war position. They are largely derived from wartime traffic and they benefit in consequence of the existence of restrictions which although justified now would not be tolerated in normal times, particularly in the case of passenger traffic.

Equally, our receipts in the years immediately before the war cannot be regarded as indicative of the probable post-war earnings. We may assume that by then road motor competition will be properly regulated, and we anticipate considerable benefit from increased employment, the arrangements proposed under the Distribution of Industry Bill, and the development of holiday and tourist traffic. On the expenditure side we have to face the fact that the cost of salaries, wages and of materials, which prior to the war represented nearly 90 per cent. of our total expenditure, has increased considerably. While, as I have said, we hope for an improvement in our post-war earnings, I think it well to point out that on the quantum of traffic which we carried in the years immediately preceding the war, the pre-war level of our charges would have to be raised by about 50 per cent. to cover the increased costs and yield the pre-war net revenue, and by about 60 per cent. to give us our standard revenue. The increase since 1939 is, broadly speaking, 16½ per cent. only.

Docks

Since the railway companies became members of the Dock & Harbour Authorities' Association they have participated in the formulation of proposals relating to the post-war organisation of docks and harbours. These proposals were approved by the Association on February 14, and have been submitted to the Minister of War Transport.

Air Proposals

As you probably know, the four main-line railway companies have submitted to His Majesty's Government a comprehensive plan for air transport within this country and to the Continent of Europe. The bases of the proposals were—

(i) A separate air company to be formed to operate regular services in Great Britain (including Northern Ireland, the Channel Islands and the Isle of Man) and to Eire and the Continent of Europe, and to undertake Charter business.

(ii) The new company to offer partnership to any independent air operators who provided regular services in this country before the war, and to those short-sea shipping lines who had a community of interest in traffic to the Continent.

(iii) The new company to operate the services without subsidy, assuming that neither subsidies nor special advantages

will be given to other air services, including foreign air lines entering this country.

The ultimate aim is to provide a comprehensive network of air services in and from the British Isles to the principal cities and holiday resorts of Europe, and a cardinal feature of our plan is the use of British aircraft. Certain conversations have taken place recently with the Minister of Civil Aviation and it is understood that a White Paper will be issued at an early date outlining the Government's policy on post-war air transport throughout the world.

Tribute to Staff

In conclusion I should like to pay a grateful tribute to our officers and staff. The facts and figures which I have given to you in the course of my remarks bear their own testimony to the magnificent achievements of all grades in meeting the demands made upon them. Unceasingly and ungrudgingly they have given of their best, and although each successive year of the war has inevitably enhanced the physical strain on the individual, the will to succeed has been paramount, and I venture to assert that in the prosecution of the nation's war effort the part played by the railwayman will bear favourable comparison with any other section of the industrial community.

After I have moved the resolution with regard to the adoption of the report and accounts I shall be pleased to deal with any questions you may wish to raise, so far, naturally, as the regulations permit me to do so. May I, however, ask any of those who wish to speak to be good enough to preface their remarks by giving me their names and initials so as to save time? I now beg to move: "That the report of the directors and statement of accounts for the year ended December 31, 1944, be adopted."

Sir Edward Cadogan: I have very much pleasure in seconding the resolution.

The Chairman: Before putting that resolution to the meeting I will ask any shareholder to put any questions that he may wish to put.

Stockholders' Remarks

Sir Charles Stuart-Williams (Chairman of the British Railway Stockholders' Union): Ladies and gentlemen: I should like to begin by referring to what the Chairman said in his concluding paragraphs; that is to say, I should like to endorse as a shareholder, and I hope as a loyal citizen, his tribute to the staff of the Great Western Railway. From the highest to the lowest I think they have done magnificent work and have faced unprecedented difficulties with courage, enterprise and devotion to duty. In paying that tribute I would like to say a special word on behalf of the running staff. I have been a fairly constant traveller on parts of this railway during the whole of the war, and I think I am correct in saying that with one exception, when my train was rather late after one of the worst blitzes that London ever had, I have hardly been five minutes late during the whole time. That is a magnificent record and as an old railwayman, with some knowledge of main lines, I think it is a thing deserving high praise indeed.

The Chairman has dealt at such length and with such completeness with the post-war problem that I find many points that were somewhat vaguely in my mind have been cleared up. I would like, however, to know exactly how this large programme of post-war rehabilitation is going to be financed. I understand that

at present the special trust fund stands in the neighbourhood of £16 millions, and before the end of the period of emergency it will certainly be well over £20 millions. One would like to know whether that very fine and very necessary programme can be financed out of that fund without the necessity of raising additional capital, and especially without raising additional capital to the detriment of the ordinary stock. (Hear, hear). I am not entirely optimistic about the post-war position. I fully realise what the Chairman has said, that conditions will be markedly different. At the same time we have at least two bull points in our favour. One is that the shortage of consumer goods both in this country and all over the world is entirely unprecedented; it is probably greater than we, in our lifetime, have ever known or are ever likely to know again. All those goods have to be transported, and it seems to me that, for some years at least, the drop in traffic will not be catastrophic but will be gradual and not so great as we are sometimes disposed to think.

There is one other point and that is the second post-war agreement. I understand that the Chairman will give me facilities for moving a resolution which refers to that agreement after the close of the ordinary meeting, and I would ask any of those present who are interested in that matter to give me their attention for a few minutes after this meeting.

Mr. A. Turner: I would like to ask you, Mr. Chairman, what are the claims for the losses of stolen goods on the railway? My reason for asking is that I see in a report of one of the railway companies' meetings last week, in 1938 the claims for stolen goods were about £42,000 and, last year, they amounted to over £700,000. If that has any relation to this company it would be nearly 1 per cent. extra on the ordinary dividend.

Chairman's Reply

The Chairman: Gentlemen, if there are no other questions I will try to answer those that have been put. I should like, first, to thank Sir Charles Stuart-Williams on behalf of the board and on behalf of all the officers and staff for his very kind words about the efforts of the company. We do appreciate a word from our stockholders and from the public very much indeed. We do try, even in these harassing times, to keep up the Great Western tradition for friendliness, helpfulness and politeness amongst all ranks of the staff. You asked a specific question as to how the big programme which I have just outlined is to be financed. I think I can tell you, with confidence, that we expect to be able to finance it out of the big accumulation of funds which will then be available and which, at the present moment, amount to about £16½ millions, and our resources. We do not expect to have to raise fresh capital. At the end of the meeting Sir Charles will have an opportunity to say some words on the agreement and, therefore, anybody who is interested is invited to stay.

Mr. Turner asked about the losses on stolen goods. These, I agree with him, have been very serious and most unhappy. We regret that the increase in what is known as pilfering has been a very grave one. Last year we had to pay £235,000 in compensation, which is about 1 per cent. of our receipts for merchandise traffic. We regret as much as anybody that this pilfering should take place, and we trust and hope that once the war is over temptation will be less and sanity will come back. I think I have answered

all the questions. I now have to put to the meeting the resolution.

(On being put to the meeting the resolution was carried unanimously.)

The Chairman: Then I have to propose: "That dividends be paid for the half-year ended December 31, 1944, of £2 10s. per cent. on the consolidated guaranteed stock, £2 10s. per cent. on the consolidated preference stock and £2 10s. per cent. on the 5 per cent. redeemable preference stock (1950). That a dividend of £2 10s. per cent. for the same half-year be declared on the consolidated ordinary stock, making with the interim dividend of £2 per cent. paid for the half-year ended June 30 last, £4 10s. per cent. for the year. That such dividends be paid on and after March 15 to the proprietors who were registered in the books of the company when balances were struck on January 29, 1945."

Sir Edward Cadogan: I have very much pleasure in seconding the resolution.

(On being put to the meeting the resolution was carried unanimously.)

The Chairman: I now have to ask Mr. Stevens to move a resolution.

Mr. Stevens: Mr. Chairman, ladies and gentlemen: With your kind permission I should like to refer to the personal note which you, Sir, struck in the opening paragraph of your able speech. You have intimated your regret that you are unable to continue to act as our Chairman. We respect your decision and share your regret. We are very glad that you have felt able to continue on our board. We are grateful to you for having presided as Chairman of this great undertaking since September, 1940, when you took over from our late friend, Lord Horne, our Chairman at that time. For about 4½ years, the most difficult war years, you have maintained the very high traditions of this great company and that, I think, is the highest praise that you could desire. For your own outstanding services to us all, speaking in the name of the shareholders, we thank you, Sir. (Hear, hear.)

I will now move the resolution in which your name appears at the head of the list of Directors to be re-elected. I beg to move: That the following directors now retiring by rotation be and they are hereby re-elected:—Sir Charles J. Hambro, K.B.E., M.C.; the Hon. Sir Edward C. Cadogan, K.B.E., C.B., M.P.; Lt.-Colonel the Hon. J. J. Astor, M.P.; the Rt. Hon. the Earl of Dudley, M.C.; the Rt. Hon. Lord Dulverton, O.B.E.; Colonel Sir W. Charles Wright, Bt., C.B.E., C.B. If someone will kindly second that resolution I will submit it to the meeting.

Mr. Waite: I shall have much pleasure in seconding the resolution.

(On being put to the meeting the resolution was carried unanimously.)

The Chairman: Thank you, Mr. Stevens, for moving the resolution and for the very kind references to myself. I have already explained to you the reasons for my action. I can only say that I am not leaving the Great Western Railway Company, who have now given me the great honour of re-electing me to the board, and I shall hope to deserve your confidence for many years to come.

Mr. Bradford: My Lords, ladies and gentlemen: It is my pleasure to propose: That the gentlemen whose names are set out on page 2 of the report are hereby appointed members of the Audit Committee for the ensuing year: Sir George Lewis Barstow, K.C.B., Chapel House, Bulth Wells, Breconshire; The Hon. E.

Cecil N. Palmer, Fernhurst, Pinkeys Green, nr. Maidenhead, Berks.; J. E. Palmer-Tomkinson, Esq., Hurst Lodge, Twyford, Berks.; D. Rupert Phillips, Esq., The Greenway, Radyr, Glam.; W. J. Stevens, Esq., Court Lodge, Merstham, Surrey.

Before asking Sir Charles Stuart-Williams to second the resolution, I would just like to associate myself, on behalf of the proprietors, very fully with the sentiments which have been expressed by Mr. Stevens just now. I have already had the great pleasure of welcoming you back personally, Sir, but I now do so on behalf of the proprietors. We are very sorry to lose you from your position, but also very glad indeed to learn that you will continue to direct this great company.

Sir Charles Stuart-Williams: I have much pleasure in seconding the resolution.

(On being put to the meeting the resolution was carried unanimously.)

The Chairman: Thank you very much, Mr. Bradford. I can only add to what you say by saying that my regret at leaving is entirely tempered by the knowledge that Lord Portal is going to take my place. I feel honoured at the fact that he should be willing to do so.

The Chairman: That concludes the business of our meeting, but on behalf of the Railway Stockholders' Union, Sir Charles Stuart-Williams wishes to move a resolution in regard to the Railway Control Agreement. I think I ought to mention before he moves the resolution that I have reminded Sir Charles of the views expressed by the Chairman of the board at the last two annual meetings of the company, but as he still wishes to move the resolution I have consented to this being done informally. I will now ask Sir Charles to move the resolution.

Sir Charles Stuart-Williams: Ladies and gentlemen, the terms of the resolution are as follows:—

"That this meeting of the stockholders of the Great Western Railway Company express its extreme dissatisfaction with the decision of the Government that the new circumstances of a major character which arose in December, 1941, do not constitute a case for the revision of the financial terms of the Railway Control Agreement; and, being satisfied that the claim for revision is fair and just, requests that representation be made by the Board of Directors to the Minister of War Transport for its reference to the arbitration of a Judge of the High Court."

I am not going to keep you very long. Similar resolutions were moved and unanimously passed at two railway meetings last week. The grounds for them are, I have no doubt, familiar to you. They are, in the first place, that we considered, and still consider, the terms of the second wartime agreement to be open to serious objection and criticism both in their manner and in their matter. Secondly, that even if, at that time, the agreement had been an equitable one, circumstances have changed so markedly during the war by reason of the fact of America's entry and her enormous contribution and the consequent strain on the railways, that that change alone constituted an additional reason for the reconsideration of the second wartime agreement. I am glad, therefore, to move that and I will ask my friend, Mr. Short, to second it.

Mr. Short: Ladies and gentlemen, you may think that the Stockholders' Union is insisting over-much upon the objections that it raised to the second agreement, but I beg of you not to feel that at all strongly. In my opinion, and I have had very many opportunities of meeting stockholders, there are very vital reasons for keeping this agitation alive and, in particular, I would like to remind you that in the last year we have got in the House of Commons a body of commoners who are interested in this matter, who have raised two debates on this particular issue, and who are willing to fight for a revision of the second agreement not only now but in what seems to me a far more important time, the time when the final agreement with the Government is negotiated. I believe myself that this standard revenue is the sheet-anchor of railway stockholding and unless we insist that it is abrogated in the second agreement, and undoubtedly it has been abrogated, we lessen the advantage of that sheet-anchor. It is on that ground that I ask you to support the resolution which Sir Charles Stuart-Williams has put before you.

(On being put to the meeting the resolution was carried with three dissentients.)

The Chairman: We shall naturally note this resolution and as this is a matter which affects all the railway companies, I shall confer, or my successor will, with the other railway Chairmen, but I want to make it clear that it must not be assumed that the board will be in favour of the course of action which this informal resolution proposes.

Mr. Stevens: May I propose a vote of thanks to the Chairman and the directors, officers and staff for their faithful services in the past very difficult year. We, and indeed, the nation, are grateful to you all for so successfully overcoming wartime difficulties in our vital services. A friend of mine, an engineer from South Africa, said to me recently: "I am not surprised the trains are late in this country. I am surprised they are running at all." I will not detain you, but I must add that we shall all be very glad to welcome back the 15,000 members of our staff and, in the meantime, to send them our greetings from this meeting.

(A vote of thanks was carried with acclamation.)

ARGENTINE NORTH EASTERN RAILWAY Co. LTD.—For the year to June 30, 1944, gross receipts were £1,141,822 (£973,073), working expenses £703,915 (£638,518), and net receipts £437,907 (£334,555). Deducting exchange losses and differences £132,704 (£100,609) and adding sundry receipts of £9,327, gives a total income of £314,530 (£234,045). Interest and sinking fund instalment on the 5½ per cent. prior lien debenture stock and interest on the 5 per cent. "A" debenture stock have been paid on the due dates. Deducting these payments and allowing for interest on arrears and other charges, there remains a credit balance of £88,949 to be deducted from the £481,328 debit balance brought forward, leaving a debit balance of £392,379 to be carried forward.

BARSI LIGHT RAILWAY Co. LTD.—The directors of the Barsi Light Railway Co. Ltd. have declared a dividend of 2 per cent. actual in respect of the half-year ended September 30, 1944, on the ordinary stock, payable on April 27, 1945.

Southern Railway Company

Board and staff changes—Financial results—Abnormal wear and tear—"D" Day traffic—War service of staff—Cross-Channel service restored—Steamship fleet—Air transport—Post-war projects—Private enterprise vindicated

The annual general meeting of the Southern Railway Company was held at the Charing Cross Hotel, London, W.C.2, on Thursday, March 8, 1945. Colonel Eric Gore-Browne, Chairman of the company, presided.

The Acting Secretary (Mr. S. E. Clark) having read the notice convening the meeting,

The Chairman said: My lords, ladies, and gentlemen, the report and accounts have been in your hands for some days; may I take them as read?

With the stirring events of 1944 behind us, and in the hope of an early end to the war in Europe, you may well imagine that there are many subjects on which I wish to speak to you today. You will, therefore, no doubt agree that only brief reference should be made to those matters which are more or less routine at this meeting, and so leave more time for the larger issues. I will mention in particular two items in the report, Nos. 5 and 7.

We have co-opted Mr. Evelyn Baring to our board. He has many qualifications for this distinction: he bears a name honoured in the history of the Southern Railway and of the City, and he has considerable knowledge of the air—an element which will, I think, play a notable part in the development of your undertaking; and he has already proved his worth.

Mr. Brain has retired from the position of Acting Secretary. In his place we have appointed Mr. S. E. Clark, who has already shown us that he is fully qualified for this responsible position.

Mr. Cobb, our Locomotive Running Superintendent, has retired recently. He had faithfully served the railway for 44 years and had occupied the position of head of his department for 8 years, winning the loyalty and respect of our footplate and shed staff. We have taken this opportunity to make some change in our departmental arrangements: in future the supervision of motive power will come directly under the Traffic Manager; this will lead to still closer control and be of assistance in the conversion of further lines from steam to electric traction.

You will, I know, wish me to take the earliest opportunity to refer to the honour which His Majesty the King has conferred on our General Manager, Sir Eustace Missenden. Never was an honour more richly deserved; on him and on the Officers whom he leads has fallen the great burden of these years of war; he has well deserved his knighthood, and all ranks of the Southern Railway shine in the reflected glory of this high distinction.

Financial Results

The accounts have again been prepared in the abbreviated form authorised by the Government as a wartime measure. No. 4 shows an expenditure on capital account of £50,845, mainly due to additional equipment at Southampton Docks. The item of £200,066 under the heading of "electric power stations" is an adjusting entry to the extent of £196,000 in respect of high-tension cables and sub-station equipment, the corresponding credit for which is under "lines open for traffic." Account No. 8—"revenue re-

ceipts and expenditure" shows the net revenue for the year as £7,000,052, £866 more than 1943. Net revenue is made up firstly of the annual sum due from the Government under the Railway Control Agreement of £6,607,639, secondly of a fixed sum of £300,000 per annum, representing the interest on the £7½ million debenture stock issued in 1939, and thirdly of receipts in respect of items excluded from the Government Control Account. In bringing these sums to account, we have made adjustments as we did last year to provide for war contingencies which have to be met from our own resources.

After meeting the interest on debenture stocks and dividends on the guaranteed and preference stocks and the full 5 per cent. on the preferred ordinary, the balance available for dividend on the deferred ordinary stock is £711,879, which will enable us to pay a dividend of 2 per cent., the same as for 1943. The balance carried forward to 1945 is £22,074, a decrease of £3,528 compared with the previous year.

In the general balance sheet (No. 19), "miscellaneous accounts" on the liabilities side stands at over £17 millions, and this for the most part consists of the unspent repairs proportion of the arrears of maintenance. On the assets side payments to the trust fund in respect of arrears of maintenance now amount to £19½ millions.

Before we leave financial matters you will, I know wish to hear the outcome of your informal meeting following our last general meeting. You will recall that Mr. Short put forward a resolution calling for a revision in the terms of the Railway Control Agreement and I undertook to confer with the Chairmen of the other main-line companies and take such action as we thought desirable.

As a result, a memorandum was submitted by the railway Chairmen to the Minister of War Transport setting out the reasons why, in the opinion of the proprietors, the agreement should be modified in two ways: first, by an increase in the guaranteed annual payment and, secondly, by an adjustment of the basic figure for maintenance to cover the intensified user of maintainable assets. We discussed the memorandum at a meeting with Lord Leathers on April 20 last and we were subsequently informed by the Minister that the Government was unable to agree to any increase in the fixed annual payment.

Abnormal Wear and Tear

With regard to the intensified user, you will remember that the Railway Control Agreement limits the charge for maintenance, except in so far as the Government may agree to the inclusion of an allowance in respect of wear and tear which is shown to be abnormal as compared with the base period, which is the average of the years 1935-1937. We have had further discussions with the Ministry on this matter, in the course of which it was shown that a substantial amount of abnormal wear and tear of railway assets has accrued up to date. The Minister has now intimated that he will

be prepared to make an allowance in respect of such net amount of abnormal wear and tear as shall be shown to his satisfaction to have accrued over the whole period of control, but this amount cannot be determined until the end of control. There we must leave the matter for the time being and at this stage it is, I think, appropriate that I should tell you something of the use to which your property has been put in 1944. This was surely the greatest year in the history of your undertaking, for it was from the coast of Southern England that the vast armies of Great Britain and the United States set forth to liberate Europe. What a task! and what an honour for us to be an integral part of it!

"D" Day Traffic

What did "D" Day mean to the Southern Railway? It involved, first of all, months of careful planning in secret by our officers in consultation with the Service authorities. These plans covered the routing and timing of hundreds of trains, the rostering of endless engines and men, the marshalling of thousands of wagons, the berthing of ships at your ports, the embarkation of personnel and the shipment of enormous military cargoes on to all kinds of craft, and so on. All this time, for months before "D" Day, our traffic in Southern England was growing—troops were moving into reception areas, stores were being received into depots, thousands of tons of bunker coal were being stacked at the dock sites, the ships were being assembled in the port areas. The plans also called for the provision of additional facilities either for immediate use or as a safeguard against possible enemy air action. In relation to the size of our undertaking no major works were required, but the additional sidings and equipment necessary involved nearly £1,000,000 of work, all of which had to be designed and carried out in a minimum of time by our Engineering Departments.

Here may I express our thanks to the Naval and Military authorities, British and American, who co-operated so well with our traffic, engineering and dock officers. Their requirements were of course paramount, but they had a real appreciation of what our share of the tasks involved and were ready to reconcile with us possible divergencies of opinion on methods of carrying out movement in this country under most difficult conditions. Again, our contacts with the Ministry of War Transport were most helpful and friendly, not only with the Railway Divisions but with Sea Transport, Port and Transit Control, and Coasting and Short-Sea Shipping, all of which were directly working with us, in this great offensive operation.

I should like to give you a few figures as a measure of the task. The number of Service personnel conveyed on duty—but not on leave—was 5½ millions: in comparison, this number was about five times as many as we conveyed in 1941. The total number of special trains we had to operate for Government requirements last year was over 26,000, nearly 2½ times as many as those in the previous year. At the same time—even on "D" Day itself—we maintained with a few modifications our full service of trains morning and evening for travel between home and business.

And now to quote Shakespeare—"The scene is now transported gentles to Southampton"—where the tonnage of traffic dealt with at our Docks was double that of a pre-war

year. In the peak month of July, Southampton reached a figure of over 300,000 tons, more than 2½ times that of a record peacetime month. The work of a normal year was done in 17 weeks.

Fruit of Private Enterprise

And now may I emphasise once more the point which is important to us all in this room and which should never be overlooked. The men, the munitions, the tanks and the stores of the armies of liberation were conveyed to the ports along the permanent way and in the trains provided over the years under a system of private ownership with your money. Eighteen of the Southern Railway steamships played their part in the invasion and your modern train-ferry vessels made a special contribution.

On one particular point I venture to put our claim on a higher plane. As a soldier my appreciation of the valour and achievements of our fighting men is unbounded; as a Southern Railwayman I rejoice in the knowledge that but for the construction by this company of Southampton Docks—including the extensions and modern equipment provided in recent years—the whole conception of the invasion of the Continent by the Allied armies would have had to be entirely different. We proudly submit our effort to the record of history.

And these major operations of war, on the success of which our national existence depended, would not have been possible unless, in the years between the two great wars, and before, your board and its officers had ploughed back annually into your undertaking large sums of money which might have been distributed in dividends, but which it was thought well not to distribute, and to devote to keeping your undertaking up to the highest possible standard of efficiency and maintenance. This is a cold, hard fact and is often forgotten by some of the political leaders of today. Surely it is a great achievement of private enterprise and one of which you and your representatives may well be proud.

Hardly had our armies secured a foothold on the Continent than we at home had to face the flying bomb. Damage was done to your property, but fortunately not on the scale of the 1940-41 blitz. This chance weapon did secure one or two unlucky hits on our lines and buildings, at some points calling for the never-failing skill and resources of the Civil Engineering Department to effect quick repairs. Traffic diversions had to be arranged at short notice, not only to provide for the normal passenger and freight movements of southern England but to maintain unceasingly the flow of munitions to the ports for shipment to the armies in France and Belgium.

I should like to speak here of all those efforts in relation to our staff, who were asked to make their greatest contribution of all after five war-weary years. Supervisors were no longer as young as they were in 1939; they had, moreover, to rely to a considerable extent on new hands, including many women, who although willing, were not experienced in railway practice. Staff were required to work long hours and some had to be moved temporarily from their home stations to work elsewhere. On top of all this, you will remember, there was the nervous strain of the flying bomb attacks on southern England, with the resulting wrecking of homes and personal injuries and loss of life, not only to our men but to their women-folk and children.

Twenty-one of our staff lost their lives on duty during 1944, and included in this

number are six who were casualties in our vessels at sea.

Engine and Wagon Building

The story of endeavour in 1944 cannot be confined to the line and to the docks; the workshops, besides helping to maintain our rolling stock in reasonably good condition, turned out 68 new engines and 2,564 new wagons. Most of the new engines and wagons were to meet war requirements of railways other than the Southern, but this output from our shops surpassed all previous figures. Incidentally, it should be mentioned that the introduction during the year of the "pay-as-you-earn" system of income-tax payments threw a heavy burden on our accountant's department and other office staffs.

Since we last met, national recognition has been given to additional numbers of the staff while serving with the company: the awards are—George Medal, 2; Officer of Order of British Empire, 2; Member of Order of British Empire, 4; British Empire Medal, 20; mention or commendation, 4: these are apart from recognition to our staff in the Forces, in the Home Guard or with the Government.

It is realised that only a few can receive national recognition: nevertheless, the honours reflect the courage, determination and skill shown by the whole of the staff during this momentous year. There has been freedom from dispute, a continuation of good feeling and mutual respect between supervisor and employee, and the same spirit that prevailed in the crews of our Southern ships under fire off the Normandy beaches has permeated every department of the whole organisation of the railway.

It has been my privilege since I have been Chairman of your company, to visit, I think, all the depots of the company in the London area, and, with the General Manager, a great many of the stations, yards, and workshops throughout the length and breadth of the system, and everywhere I have found unflinching good will and a team spirit of which you may well be proud. I wish I had time to tell you some of my experiences, but suffice it to say that throughout all ranks there is a great pride in the Southern Railway.

The success of our Forces on the Continent has, as you are aware, enabled certain modifications to be made at home. Our service of main-line passenger trains was, for instance, reduced during the summer to release engines and men to move the invasion trains. The public suffered with good-humoured toleration much inconvenience during this time, but the service which was operative last winter was generally restored in October. There are still, however, no refreshment facilities on the ordinary trains, but it is hoped that in the not too far distant future conditions will have improved sufficiently to allow the Minister of War Transport to authorise the restoration of restaurant cars, at any rate on some of our longer-distance trains.

Another event has been the standing down of the Home Guard. You will recall that at these meetings mention has been made previously of the organisation of our own Southern Home Guard, with its battalions and companies all within the framework of the railway. Indeed, we were one of the first—if not the first—of the public utility undertakings to organise a Home Guard on this basis. You will, I know, like to take this opportunity of thanking all of our staff who gave of their best, not only in the Home Guard, but in the ambulance, fire service

and such-like duties. We welcome the fact that the situation is now such that after a day well occupied with hard work on the railway they have a little more leisure time for rest and recuperation.

Then there has been the alteration from "blackout" to "dimout." The regulations are such that it is not possible at this stage to go all the way back to peacetime standards. Most, however, of our passenger coaches are now running with normal lighting restored, and as far as practicable and availability of labour and materials allow, improvements have been made at our principal stations throughout the system.

Cross-Channel Service

Perhaps the most outstanding feature for this company has been the restoration of a cross-channel service. Our last Continental sailing was on June 16, 1940, but on January 15 this year a service between London and Paris was once more available. The conditions of travelling fall short of what we achieved in peacetime—and far short of our post-war aims. There are delays which are unavoidable in present circumstances and we have not been able to re-condition the steamers to the state we would like. Passages at present are available only for those sponsored by the Government, but as I travelled once more on the boat train from Victoria Station and on the bridge of one of our Southern Railway Cross-Channel Packets, passing through the pier-heads I could almost feel

"France standing on the top of golden hours,
And human nature seeming born again."

Much has to be done before normality is reached, but we are, all of us, indeed happy to resume once more contacts with our colleagues in France and Belgium, and the Southern Railway will play its part in helping these countries to heal their wounds and fill a proper and respected place amongst the nations of the world.

In saying this I do not forget Switzerland: all through the dark years of the war we have managed to keep contact with our agent in Basle, Dr. Im Obersteg, who for his part has never lost faith in the ultimate success of our arms. We have been comforted and cheered by his brave words to us. Nor do we fail to remember that even at this late stage there are still Southern Railway staff under Nazi rule in the Channel Islands. We feel acutely their unhappy position after nearly 5 years of occupation, and hope that the raising of the siege will now not be too long delayed.

And now you will wish me to say something of the future, and to tell you of the development of some of the ideas which I mentioned to you last year. Since we have spoken of Continental business it may be convenient if I speak first on our post-war plans in this connection, for it is here that before the war your company had one of its more profitable sources of revenue, and where, unfortunately, we have the greatest leeway to make up. At the outbreak of war we had a fleet of 42: today the number is reduced, and of those ships that remain some have reached, and others will soon have reached, the end of their useful lives. I will mention the names of a few of the ships that have gone, names which I imagine many of you in this room almost will have loved, and will recall to all the graceful lines of our cross channel packets with their white upper works and buff funnels: the *Brighton*, the *Maid of*

Kent, the Paris, the St. Briac, Lorina, the Normannia.

We have prepared a plan for the re-establishment of the Southern Railway fleet and are already in touch with our shipbuilders and with the controlling Government Departments in regard to the placing of orders. We shall seek to incorporate, not only in our vessels, but in the arrangements at the ports and on the boat trains, the best modern ideas for the comfort of our passengers and for the convenience of handling of our specialised cargoes. On the steamers we shall adopt the most up-to-date methods of propulsion and we shall pursue every effort which will add to the comfort of our passengers. I will tell you in a moment or two about the air developments, but we hold the view that there will still be a considerable traffic by our surface routes and we are determined to see that the potential traveller to the Continent will have carefully to weigh up in his own mind whether he will take the fast air service or the rail and sea route which, though less speedy, will be equipped with every facility for the passenger's comfort and for his enjoyment of the scenery *en route*. And what I have said in regard to travel to the Continent will be also applicable to the Channel Islands and to the Isle of Wight, also served by our steamers. We are in the transport business in all its forms: our aim will be to see that the public has the most efficient service possible by rail, road, sea and air.

Air Transport

It is not necessary to remind you of the importance which your board attaches to air transport. I dealt with this matter last year, and, in October last year, the four main-line railway companies submitted to the Government a comprehensive plan for air transport, both within this country and to the Continent of Europe. We offered to embrace in our proposed new air company independent air operators which were providing regular services in this country before the war, and also those shipping lines which had a community of interest with us in that they provided regular services by sea for traffic for which air transport may, in the future, be needed. We offered, moreover, to provide the services without subsidy on the understanding that subsidies were not given to other competing air services, British or foreign.

Since then, we have been discussing with Lord Swinton, recently appointed Minister for Civil Aviation, the form in which the railway companies might participate in air services.

As you know, the railways, by their long experience in cross-channel services, by their extensive international trade connections and by their operation of air services before and during the war, are in a special position to make an effective contribution to the future of British civil aviation. I think I may tell you that negotiations on points of principle have been concluded, and the results will be embodied in a White Paper which will be presented to Parliament very soon. Obviously, I cannot go into detail at this meeting, but I think I may say that we hope—with the other three railways—to have a substantial share in European and internal air services and I know you will agree that we shall be right to accept the invitation to play our part in this way, for flying has a great future.

We will do our best to see that in our sphere of interest British air services using British aircraft are the best in the world, and we shall ensure that the older

forms of transport bring to the assistance of the new all the facilities and experience that they can offer. The discussions with Lord Swinton—and with his Director-General of Civil Aviation, Sir William Hildred—have been frank, businesslike, and with each party in no doubt of the intentions and good faith of the other. The relationship between Government and private enterprise is not always easy, but in the new activities we look forward to a happy co-operation, with an understanding of the separate functions appropriate to the Ministry and to the air transport undertaking.

Road Transport

Turning now to road transport, I explained to you last year the happy relationship which exists between your company and the principal motor bus undertakings in the south of England. On the freight side, you know that we have large interests in Hay's Wharf Cartage Company, Pickfords, and Carter Paterson: in January of this year, the new National Road Transport Federation was incorporated and the railway companies have indicated their desire to discuss with it our mutual post-war problems. We appreciate the part which road transport must play in the future of this country and its industries, and we seek to achieve harmony with road interests to this end.

We have continued our discussions with independent dock authorities through the medium of the Dock & Harbour Authorities' Association, of which the four railway companies are members. After the war, it is possible that benefit could be obtained by greater co-ordination in certain areas between the various dock undertakings and proposals for a form of organisation to achieve this were approved at a meeting of the Docks & Harbour Authorities' Association on February 14. These will be submitted to the Minister of War Transport. It is a good augury of future goodwill that our Docks & Marine Manager has been elected Chairman of the Southampton Harbour Board and also represents the non-railway-owned ports of the south coast on the Executive Committee of the Dock & Harbour Authorities' Association.

You will realise that our officers have their hands pretty full these days, but in spite of the burden which they are carrying they have found time to give much thought to detailed post-war matters. Each day as we get nearer to the end of hostilities, your board sees in clearer outline the problems which will confront us and is able to initiate with the officers a study of the best methods for their solution.

It is not practical to project a programme far into the future. There are many imponderables: the level of prices, the availability of labour and materials, the spending power of the nation, the volume of trade will all have their bearing on the policy of your board. It will be necessary to proceed in stages.

Accommodation for the headquarters' executive officers and their staffs is problem number one, for on this all else depends. As you know, part of our organisation has been decentralised to Dorking, but it will be essential for vigorous and effective post-war administration to bring back together in London the traffic and engineering departments, and also to have available drawing offices for those engaged on rebuilding plans. We have lost by bombing our headquarters offices at London Bridge, and part of those at Waterloo and Victoria. This problem is now being specially

studied to find a short cut which will provide for the more immediate post-war requirements in this respect.

Arrears of Maintenance

Next must come the job of making good the arrears of maintenance which have arisen during the war. We must, for instance, restore our permanent way to a condition capable of withstanding heavy loads, not only at pre-war speeds but faster still. Each track-renewal must be carried out to give smoother and quieter running and be so designed to require the minimum of day-to-day maintenance. Practically no new passenger coaches have been built during the war, and new rolling stock will have to be provided to replace that which is now worn out. The layout of the various types of new coaches is now the subject of close study. As you know, on the Southern we have to cater for well defined peaks of traffic—morning and evening on the suburban trains and at holiday times on the main line. To run the maximum number of trains over the track at these periods, station times for loading and unloading of passengers have to be curtailed as much as possible. These factors have to be taken into account in relation to the average length of journey. We shall give more comfortable, more cheerful and brighter coaches, and shall not hesitate radically to depart from the present designs where desirable.

Our plans will of necessity have to be related to national requirements, and it cannot be denied that in the immediate post-war years national policy must be first directed to the restoration of international trade and the provision of adequate housing for the people. We hope to assist overseas trade by keeping up to date our dock facilities, by the provision of faster freight transits between factories and ports, and by the provision of suitable depots for the traffic in London and elsewhere. In respect of housing, your board has been examining Sir Patrick Abercrombie's plan for Greater London. The movement of population proposed for our area is less than that which occurred between the two wars: nevertheless, if the plan is carried out, additional rail facilities will be needed, and indeed will have to be provided before the new houses are occupied. An associated question is the possibility of linking with a fast train service the centre of London and the principal airport, whatever site is selected—Heath Row (near Staines), Cliffe (below Gravesend), or elsewhere. Our time and energy—and available labour and materials—may well have to be spent in these directions for a number of years. The other areas served by your system, however, cannot be neglected. The transport of holiday folk must still be a major feature of your undertaking. Many of the seaside towns—especially in the south-east—have had to face hard knocks during the war: we shall be anxious to co-operate with them in their re-establishment as holiday resorts. We are planning an extension of electrification for both passenger and freight trains. Preliminary schemes are now being investigated: their acceptance by your board must depend on a sound assessment of the economic factors involved. Considerable initial expenditure would be required and we can embark on these schemes only if we are assured of a defined and settled national policy for transport as a whole.

Further thought is also being given to staff matters. The Government scheme for national insurance was published during the year, and this we are studying in

relation to our existing arrangements. We are making preparations to welcome back our staff who are now serving with the Forces, and to enlist new staff who have gone straight from school into the Forces. Much depends on the careful and considerate handling of these men: our officers hope to appreciate their feelings and gradually accustom them to the change of environment. We owe them much, and we shall seek so to arrange their rehabilitation that they have hope in their hearts and faith in the future of this undertaking and in the British way of living.

It has been possible to touch only on a few of our problems. I have not enlarged on the question of the adjustment of rates and fares to meet working costs, to provide for renewals and to allow a fair return on the invested capital. Without a surer indication than we have at present of likely price levels after the war, it is difficult to make a definite pronouncement. All we can do at this stage is to assemble all the facts, to study them, and to be ready at short notice to make our contribution to the solution of this national problem.

I have said enough to show you the many ways in which changed conditions after the war will affect your property. A main line of railway cannot be diverted at will or new branches thrown out quickly to meet variations in trade: by its physical nature a railway tends to be an inflexible tool, but we shall strive to overcome this. Our officers are keen and alive to the situation: technical research and traffic experiments will be pursued, and our interests in all forms of transport will aid our adaptability. Hazards there will be, and hazards will have to be confidently faced, skilfully countered and—with good fortune—overcome. Risk is the very foundation of private enterprise, and risks prudently taken are the essence of a sound commercial undertaking.

The Southern Railway Company came into being in 1923. Since then, mistakes there may have been, but when all is said and done we can claim to have kept a true course: we can claim an enviable record of enlightened public service in peace and in war for over twenty-one years. In full knowledge of our duty to our public, to our staff, and to you, we shall do our utmost to keep your flag flying whatever wind may blow. We are confident that the Southern Railway Company under the proved system of private ownership can continue efficiently to serve this country and its people, and in this confidence we face the future.

Now in conclusion. We are entering a new world; you who are the owners of this great undertaking, and we who form your board and who are your trustees. In this new world we are faced with rising costs for the materials which we use; for the wages of the men and women who work for us; for holidays with pay; for supplementary allowances for superannuated staff; for staff canteens, and the welfare of all Southern Railway men and women; for National Insurance; for the provision of holiday camps; and many other items of social improvement. We are told that private enterprise, if it is to survive, must make still further contributions to this new world, and at the same time we are invited to be adventurers.

I know that I speak for all my colleagues when I tell you that we are prepared to accept this invitation. As I have told you, we have many improvements

and many developments in view for your undertaking; but the capital cost involved will be great, and to raise capital we must prove ourselves to be credit-worthy, and in every pound we spend think not only of you, the owners, but of the public which we serve. It is the fashion nowadays to consider these two interests conflicting, whereas in truth each must depend on the other. And surely we have the right to claim to be allowed to carry on in the post-war world in fair and equal competition with competing interests. With this freedom we can go forward in a spirit of adventure; difficulties there will be, but courage on your behalf will not be lacking, provided we have your trust and confidence, and you appreciate that, in spite of the many problems, political and economic, with which we are faced, we are absolutely determined to do our best for you, and for private ownership which you represent.

I beg to move that the report of the directors and statement of accounts for the year 1944 be, and the same are hereby received and adopted.

The Earl of Radnor: I have much pleasure in seconding that resolution.

The Chairman: Ladies and gentlemen, if any shareholder has any question he would like to ask now, will he please ask it.

Stockholders' Remarks

Mr. Instone said he congratulated the Chairman on the most eloquent survey of the great achievements of this company that he had heard. He would like to associate himself with the remarks of the Chairman in congratulating the Chief General Manager, Sir Eustace Missenden, on the honour His Majesty conferred on him last year. Wartime necessity had forced the railways to work as a combine. What was the post-war position going to be? Were they going to develop into a monopoly with the other companies, which he strongly deprecated, or were they going to be allowed to develop into separate entities, where healthy competition, private enterprise and personal contacts always had been so very successful, especially with the Southern Railway. He rejoiced to have heard the Chairman give so much time to a matter of the most paramount importance to this company especially.

Mr. Ernest Short said he was speaking on behalf of the British Railways Stockholders' Union. He would like to stress the optimistic note towards the end of the Chairman's speech. He believed, in connection with railway stockholdings, there was a great deal of unnecessary pessimism. The last four or five years had proved that the railway service was of infinite importance, and that with very little help this particular company could recover the position which it held in the 'twenties. Up to the present there had been no recovery from the slump of 1931. The shares at the present time were almost on the same plane as in the middle 'thirties; whereas if general industry was taken into account they ought to be well in the region of that of 1929. The optimistic note struck by the Chairman ought to go some way to dispelling that pessimism.

Mr. Gregg said the name of the General Manager did not figure on the report. He would also like to know the directors by name as they came in. He also asked if the cross-channel steamer repairs were performed in the company's shops or sent to the builders. Why should not all the hotels and all the refreshment departments be centred in one committee with a

catering expert at the head of it? It would be an advantage to the whole company if the hotels and catering and refreshments, instead of being put out to hotels up and down the country, were all managed from one centre. He hoped no more streamline monstrosities would be seen on this company again. As a locomotive Builder for 35 years, he had no faith whatever in them. He also hoped there would be no extension of long-distance electrification.

Chairman's Reply

The Chairman: Ladies and gentlemen, if there are no more questions I will do my best to answer those which have been asked. First of all, Mr. Instone, I would like to thank you very much for the very kind things you have said about me. Then you asked me whether this company was in the post-war world going to associate itself with a monopoly of railway transport. My answer to that is an emphatic "no." As soon as our present tenants leave our premises the landlords will walk in again. They will be very glad to get back. They see many difficulties ahead of them, but they look forward to a post-war world, when the service which they give is going to provide a reasonable return to the stockholders, because it is a good service and prepared to stand up against any competition it may meet. I hope that gives you a complete answer. I would not disguise the fact that the war has taught us all a lot, and it may be there will be closer working between the four main-line companies, but we shall fight to retain our individual entities, because I am proud enough to think that in this railway at any rate there is a Southern Railway spirit, right down the whole length and breadth of the system, which means just everything. Then you talked about aviation. I did mention that in my speech. I can assure you this board fully appreciates the potential value of aviation. I hope you will hear very soon of the Government plan, and in the plan, no doubt, we shall play a very great part. I would like to emphasise this, that we are not out to kill the air. We are out to work the air into a system of transport. It is said by some of the political parties that if the railways get hold of the air they will not let the air go; they will stop its development and try to compete against it. We regard the air as complementary in transport in the present-day world, and we are not out to kill it in the least. We are going to try to fit it into the whole of our structure.

You also spoke of Sir Eustace and his Deputy. I know that I speak for all my colleagues when I tell you that we appreciate enormously the work of these officers and of Mr. Elliott, who has been helping Sir Eustace on the air problems. I am very glad to hear that you think so well of his knowledge.

Mr. Short, you are going to talk again, but I will just deal with the point you made about the Stock Exchange quotation of the stock. It is awfully difficult to help about that. It is, of course, the lack of public confidence; they are frightened of politics; they hear what happens at the Trades Union Congress and they read the papers and they hear what Mr. Attlee says. That is why our stocks fall so low. I like to think they are worth much more, and I like to think that in the post-war world we shall make them worth much more. I do not think there is any help we can give, except by showing from day to day and hour to hour our enterprise and confidence, and

please God that will get through to the British public.

Now, Mr. Gregg, I come to you. You are a very old friend at these meetings and we are always glad to have you and to get your questions. I am sorry that the name of the General Manager does not appear in the report. I am afraid I did not notice that. We shall have to find a home for it somewhere.

Mr. Gregg: When you called out his name I did not hear what you said.

The Chairman: His name is Sir Eustace Missenden. I am very sorry it does not appear on the printed report. I do not know why it does not. I suppose it never has. "It never has," Sir Herbert Walker says. We will try to get Sir Eustace Missenden's name in print in future. Then you asked about the names of the directors. That is, again, a bit difficult. If you like I will call them to their feet one by one. I do not think you would want me to do that. At a rotary meeting you appear with your badge with your name on it and your trade. I think that would be rather difficult at a meeting such as this. You asked about our cross-channel steamer repairs. The answer to that is that in wartime (I must be careful to reveal no secrets) the actual destination of a ship for repairs is a matter for the Ministry of War Transport, it just depends on what happens to fit in best. Sometimes they go to their port of origin and sometimes they are done locally. There is no general rule about it. In other words, a Southern Railway ship waits for repairs until there is a suitable repair yard for it.

Then you talked about catering. I am sorry I missed that in my speech. We have been considering that very carefully and I hope, all being well, when we face you again you will find that what you have very near to your heart is well on the road. The matter is very much before us. Sir Eustace and I have had a lot of talks. There is quite a lot going on, but I have nothing to tell you yet. The matter is under examination.

Then you do not seem to like streamline locomotives. I am sorry about that. I can only tell you, with these "Channel Packet" locomotives which have again come into operation recently, they really have been our salvation. We have had to run fewer trains and we have been able to carry heavier loads on the trains we have run, and in spite of your not liking the layout of them (streamline is fashionable nowadays, if nothing else) I am sure we are all grateful to Mr. Bulleid who designed these engines. They have been doing the most marvellous work, and I will not promise you for one single instant that we shall not have some more.

Mr. Gregg: All I can say is that you can get absolutely equal power without covering the engine with biscuit boxes.

The Chairman: I am sorry. Then you talked about long-distance electrification. As I told you in my speech, we have many schemes under consideration, but none of them is really yet near completion. We know the dangers of long-distance electrification, and I did venture to emphasise in my speech that it is really the economic result of the electrical adventure that matters to us. We are not going into any of them unless we see a fair return on the capital employed. Those are all the questions, I think.

May I now put the resolution: "That the report of the directors and statement of accounts for the year 1944 be and the same are hereby received and adopted."

(The resolution was put to the meeting and carried).

The Chairman then proposed, and the Earl of Radnor seconded, the resolution for the payment of dividends.

(The resolution was put to the meeting and carried).

Sir Francis Dent: I beg to move: "That the following directors, who retire by rotation at this meeting, namely, Colonel Eric Gore Browne, the Right Hon. the Earl of Radnor, Mr. Herbert William Corry, the Right Hon. Sir George Loyd Courthope, Bart., and the Right Hon. Lord Kennet, be and they are hereby elected directors of the company."

Lord Ebbisham: Mr. Chairman, ladies and gentlemen, I have very great pleasure in seconding the resolution.

(The resolution was put to the meeting and carried with acclamation).

Mr. W. Bishop: Mr. Chairman, my Lords, ladies and gentlemen, it is very gratifying to us to know that Sir Nicholas Waterhouse, who is here today, is ready to continue as Auditor of the company. He is eligible and he offers himself for re-election. He requires no recommendation; he must be well known to practically every proprietor in this room, and they must know that he is a gentleman who is an eminent success in his profession. I move the resolution "That Sir Nicholas Waterhouse, K.B.E., F.C.A., be and he is hereby elected an Auditor of the company."

Mr. M. A. Edwards: I have very much pleasure in seconding that resolution.

(The resolution was put to the meeting and carried).

The Chairman: Ladies and gentlemen, that concludes our meeting.

Captain Instone proposed a vote of thanks to the Chairman which was carried with acclamation.

The Chairman: My Lords, ladies and gentlemen and Captain Instone, thank you very much indeed for the very kind words you have said. I can only tell you that as far as this board is concerned it is a very happy party. There is a won-

derful spirit throughout the line, and it is a very proud position to be their leader. Thank you very much indeed. I declare the meeting informal, and Mr. Short, will you say what you have to say.

Informal Meeting

Mr. Ernest Short: Mr. Chairman, ladies and gentlemen, I am going to be very brief in the remarks I have to make. The arguments I want to put before you are very familiar, but the resolution I ask you to pass has already been passed by three railway companies during the past week, and I think it would be most unfortunate if the proprietors of the Southern Railway were not prepared to support the stockholders in the other three main lines on this question which I submit to you is one of principle. The resolution I am asking you to carry is:—

"That this meeting of the stockholders of the Southern Railway Company expresses its extreme dissatisfaction with the decision of the Government that the new circumstances of a major character which arose in December, 1941, do not constitute a case for the revision of the financial terms of the Railway Control Agreement: And, being satisfied that the claim for revision is fair and just, requests that representation be made by the board of directors to the Minister of War Transport for its reference to the arbitration of a Judge of the High Court."

Mr. Arthur J. Aldis seconded the resolution, which was carried.

The Chairman: Mr. Short, ladies and gentlemen, you will not expect me to make any observation on the resolution at this meeting. I will consult my brother Chairmen and my board about the action we should take as the result of the resolution which you have passed, and in due course advise you of what action we do take, and, on any action we do take, what the result has been.

(The proceedings then terminated).

Mersey Railway Company

Financial results—Air raid damage—Increasing traffic—Post-war planning—Mersey tunnel tolls—Tribute to staff

The annual general meeting of the Mersey Railway Company was held on March 13, at Winchester House, 100, Old Broad Street, London, E.C.2.

Mr. John Waddell, Chairman of the company, presided.

The Chairman said: The financial arrangements with the Government have not been varied during the past year. The accounts are again presented in the form approved by the Ministry of War Transport, and the directors' report has again been issued, together with a summary of the year's working. The net revenue available amounts to £109,976 and permits a dividend of 2½ per cent. on the consolidated ordinary stock. In the terms of the Government agreement no allowance has been made for the cost of making-good abnormal wear and tear consequent on heavy wartime traffic, and this is a matter which will have to be taken into consideration when the control period comes to an end.

It is now possible to give information regarding the war damage to the railway. During the late summer of 1940 minor damage was sustained due to blast and shrapnel, but the first serious incident as affecting the railway occurred towards the end of September, 1940. A high-explosive bomb fell near Liverpool Cen-

tral Station (C.L.C.), and, passing between two crossing timbers on the surface, penetrated the ballast and about 5 feet of concrete and exploded in the tunnel between two Mersey 6-coach trains which were stabled in the sidings there. All the coaches were damaged but, with the exception of one, it was possible to repair them. The line was cleared for the train service to commence at the normal time, so the travelling public was not inconvenienced by this incident. The next serious incident occurred one evening during the same week, when a heavy high-explosive bomb dropped on some houses on the south side of Beckwith Street and penetrated about 19 feet into the ground alongside the Park Tunnel at a distance of 440 yards from Birkenhead Park Station. The bomb exploded and pushed in the side of the tunnel and blocked both the railway tracks. This meant that trains could not run between Hamilton Square and Birkenhead Park Station, and whilst the tunnel was blocked a shuttle service of buses, commencing immediately the "all clear" was sounded, was maintained between those stations. Repairs were carried out from the surface, and the line was opened for through railway traffic again just eight weeks after the damage had occurred.

During the latter part of February, 1941, a heavy high-explosive bomb fell in Beckwith Street, making a crater on the top of the Birkenhead Park Station cutting slope and damaging a Mersey Railway 6-coach train which was in the siding below. About the middle of March, 1941, heavy damage was caused at Birkenhead Park Station and near Green Lane Station, Birkenhead, and damage also was done to the retaining wall at Birkenhead Central Workshops. Two land mines caused serious damage at Birkenhead Park Station. The booking hall and offices were completely wrecked, with the staircases to the platforms and the platform buildings badly damaged. One span of the Duke Street bridge was destroyed, and a 6-coach train standing in the carriage shed below was very badly damaged. A large crater was made in the middle of the railway track at the Hamilton Square end of the station. The train service from Liverpool via Park to West Kirby was recommenced five days later, and the train service to New Brighton was resumed after six days. Although the station was badly damaged, temporary repairs were effected, and it was opened for traffic eleven days after the incident.

In the severe raids early in May, 1941, heavy damage again was sustained, but this was mostly at James Street Station, Liverpool. The station buildings at street level were practically demolished, and the lifts were put out of commission. The station was closed to traffic for six days, when the Water Street subway was opened; but the main entrance and lifts were not available until the following December. Over a period of six months over half the company's rolling stock was damaged in one way or another, but the train service was maintained almost at full strength.

I have dealt only with major damage and disturbance. In addition to these, we had other incidents of high-explosive bombs and incendiaries; but these were promptly dealt with and did not cause any undue delay. In practically all cases when the train service between a pair of stations had to be suspended, with the co-operation of the local bus operators a shuttle service of buses was arranged to carry the railway passengers between those stations. In all this trouble, however, it is satisfactory to note that the Mersey Railway train service between Birkenhead and Liverpool never stopped. In spite of difficulties of damaged premises, lines and rolling stock, the cross-river train service was maintained throughout, which redounds to the credit of the staff which carried out its duties with commendable courage and resourcefulness. At the same time extremely heavy traffic was handled, as at times both the Wallasey and Birkenhead ferries services were entirely suspended.

The traffic carried by the undertaking still continues to increase, although a part of it is consequent on activities connected with the prosecution of the war. The indications are, however, that the work carried out in the years immediately before the war has borne fruit; and it is confidently expected that after the conclusion of hostilities the company will be able to resume steady progress and reap full advantage from the through train services into the Wirral peninsula.

Post-war planning schemes are receiving the attention of all local authorities, and the interested railway companies on Merseyside are working together with the object of participating in such schemes and thereby providing additional and

improved facilities for the travelling public.

In some quarters the agitation still continues for the Mersey Vehicular Tunnel (Queensway) to be made toll-free, and, according to the press, the Mersey Tunnel Joint Committee is preparing to approach the Government with the request that Queensway should be made a toll-free national highway, and that the State should take over the present debt and future financial responsibility. As I said last year, the Mersey Railway has maintained essential passenger transport services between the two sides of the river for a considerable period, and these services were acknowledged during the passage of the Mersey Tunnel Act of 1925 and by the provisions embodied in the Act, which were expressly inserted by Parliament for the protection of the stockholders of the Mersey Railway. In these circumstances, I cannot stress too strongly that provisions of such a nature cannot be lightly regarded, but, on the contrary, the intentions of Parliament must be

borne in mind should consideration be given to the proposal to abolish the tolls.

The staff, including a large percentage of temporary employees both male and female, has during the past year carried out its duties in a very satisfactory manner and thus contributed to the smooth working of the railway. I have much pleasure in placing on record our great appreciation of its services. The company's fire-watching scheme and the Home Guard duties were relaxed towards the end of the year, and to those who took part in the activities we tender our sincere thanks. In conclusion I should like to pay tribute to those members of the staff serving with H.M. Forces, and hope that a speedy termination of the war will enable them to return to their homes and families.

The report was adopted, and the retiring Directors, Mr. A. D. C. Parsons and Sir G. G. Craig, were re-elected. The retiring Auditor, the Rt. Hon. Lord Plender, G.B.E., F.C.A., also was re-elected.

Questions in Parliament

Government Control of Railways

Sir Geoffrey Mander (East Wolverhampton—Lib.) on March 7 asked the Parliamentary Secretary, Ministry of War Transport, if he would consider the advisability of introducing legislation to make permanent the wartime regulations for public control of the railways.

Mr. Noel-Baker: Under the Railway Control Agreement of 1941, the railways will remain under Government control for at least one year after the cessation of hostilities, and probably longer. There will be, therefore, ample time for the consideration of the important questions of the future.

Sir G. Mander: Will the Parliamentary Secretary take care that this great public service is not handed back to private enterprise?

Mr. Rhys Davies (Westhoughton—Lab.): Has the Parliamentary Secretary done anything to preclude the possibility of any railway company concentrating its productive work in such a way as to make some of their smaller plants derelict as soon as the war is over?

Mr. Noel-Baker: During the war their production is fully controlled in the national interest.

Sir Henry Morris-Jones (Denbigh—Lib. Nat.): Is it not a fact that a continuation of wartime controls after the war is not desired by the Liberals of this country?

Transport Statistics

Mr. Ellis Smith (Stoke-on-Trent—Lab.) on March 6 asked the Parliamentary Secretary, Ministry of War Transport, if he would set out in tabular form the millions of ton-miles saved a year for the years 1940, 1943 and 1944 by improved organisation; the millions of ton-miles saved in the last year for which figures were available for biscuits, sugar, animal feeding stuffs, potatoes, seed potatoes, chocolate and sweets, flour, beer, fish and tea; what was the calculated saving in the number of trains and gallons of petrol; what was the saving made by the better use of railway wagons; what was the percentage increase in canal traffic and coastwise traffic; and any other figures to provide a picture of the savings made by wartime organisation.

Mr. P. J. Noel-Baker (Parliamentary Secretary, Ministry of War Transport) stated in a written answer: One of the economies which war conditions have

imposed upon us is a drastic pruning of statistical returns and I regret that figures such as Mr. Smith desires are not available. Even if statistical records were available, the many changes involved by the war, including radical alterations in the general kind and flow of traffic, transfers between different forms of transport, enforcement of priorities in movement and so forth, would vitiate any overall comparison of results before and under control. The following figures, however, may be of interest:—

INCREASES OR DECREASES OVER PRE-WAR (1938)			
Railways		Increase	Decrease
		Per cent.	Per cent.
Net ton-miles			
General merchandise	...	86.0	—
Minerals and heavy merchandise	...	68.3	—
Coal traffic	...	12.6	—
Average load per wagon			
General merchandise	...	41.5	—
Mineral and heavy merchandise	...	6.3	—
Coal traffic	...	1.8	—
Loaded wagon-miles	...	30.98	—
Empty wagon-miles	...	—	8.46
Average number of loaded wagons			
per train	...	12.65	—
Passenger journeys	...	6.41	—
Passenger miles	...	70.0	—
Passenger-train miles	...	—	29.0

An indication of the reduction in fuel consumption for commercial road transport in spite of the demands of war production is shown by the following ratios:—

Year	Fuel consumption
1938	100
1940	79
1941	80
1942	74
1943	70
1944	72

As to canal transport, there has been a slight drop in traffic since 1938 owing to difficulties of labour supply and diversion of traffic from normal routes, but the traffic carried remains fairly constant at between 11 and 12 million tons a year.

Railway Losses and Thefts

Mr. Craik Henderson (Leeds, North East—C.) on March 6 asked the Parliamentary Secretary, Ministry of War Transport, how the number of claims made in respect of articles lost or stolen on rail during the last complete year for which he had records, compared with similar claims for the last complete pre-war year.

Mr. Noel-Baker in a written answer stated: In 1943 the number of claims in respect of which payments were made by the four main-line railway companies and the Cheshire Lines Committee for articles lost or stolen was 579,542. In 1938 the number was 151,426.

Notes and News

Emu Bay Railway Co. Ltd.—An interest payment is announced on the Emu Bay Railway Co. Ltd. 4½ per cent. irredeemable debenture stock. The payment, representing 4½ per cent. for the year to December 31, 1944, with 2 per cent. off arrears, will be made on April 2.

State of Bahia South Western Railway Co. Ltd.—An interest payment of 3 per cent., plus interest thereon, for the half-year due November 1, 1938, is announced on the 8 per cent. prior lien debenture stock of the State of Bahia South Western Railway Co. Ltd.

Wantage Tramway (Increase of Charges) (Revocation).—The Minister of War Transport on March 2 made the Wantage Tramway (Increase of Charges) (Revocation) Order, 1945. Copies may be obtained from the Ministry of War Transport, Berkeley Square House, London, W.1.

Six Wheel Bogies.—Referring to the editorial on p. 198 of our issue of March 2, in the interests of accuracy, we are asked to state that the G.W.R. has used six-wheel bogies under newspaper and storage vans since 1910, under sleeping cars since 1930, and under dining cars since 1936, in all 52 vehicles.

Machine Tool Industry Purchase.—The directors of Coventry Machine Tool Works Limited have purchased from the Ministry of Supply the whole of the share capital of John Stirk & Sons Ltd., Halifax. Reports indicate that the deal involves well over £100,000. In April, 1942, the Minister of Supply appointed a controller of John Stirk & Sons Ltd., and acquired the ordinary shares at £3 5s. each, and preference at 12s. 6d.

S.R. "Incidentals."—A review of the incidental activities of the Southern Railway during 1944 shows that £200,000 were subscribed to "Salute the Soldier" campaigns; 16 new canteens were opened; and 22,989,858 meals and hot beverages were served in staff canteens. Line-side activity continued unabated. More than 13,000 allotments are now being cultivated. The Southern Railway staff has contributed £43,778 to the Red Cross "Penny-a-Week" Fund since its inception.

British Help for South African Railways.—In the course of his railway budget speech in the South African House of Assembly recently, the Minister of Transport said that the South African Railways in 1944 had received vital supplies from Great Britain to a value of more than £2 million sterling. Deliveries had included 23 large locomotives at a time when British shipping resources were strained to their limits, and the South African Government was deeply conscious of the British consideration for the needs of the Union.

British Railways in Argentina.—In a joint statement to Reuters regarding an article in the *Wall Street Journal* alleging delinquencies, British-owned railways in Argentina point out that the British railway franchise does not expire in 1946; it is Article 8 of the Mitre Law that expires. This Article grants exemption for railway materials from customs duties. Allegations that British railways had failed to make improvements are met by the statement that four British-owned railways, between 1919 and 1929 had invested more than £40,000,000 in improvements, additional to £1,000,000 annually between 1926 and 1930, and £2,133,000 between 1931 and

1935. The statement affirms that the railways continue, in spite of wartime difficulties, to give adequate service to the public.

G. D. Peters & Co. Ltd.—In the report of G. D. Peters & Co. Ltd. for the year 1944, it is stated that the profit after deduction of all expenses, depreciation, and E.P.T. amounted to £50,704 (£63,575). The final dividend of 7½ per cent. less tax (same) makes, with the bonus of 2½ per cent. less tax (same), 17½ per cent. less tax (same) for the year.

British Wagon Co. Ltd.—At the annual general meeting of the British Wagon Co. Ltd., held recently in Rotherham, the Chairman, Mr. W. H. Copley, F.C.A., referred to the company's substantial contribution to the war effort, especially in connection with the financing of railway wagons, road transport vehicles, ships, agricultural tractors and implements, public works contractor's plant and machinery of all descriptions. The hire-purchase resources of the company, which had been in business for seventy-six years, would be available in the work of reconstruction.

South African Air Transport Plans.—Mr. F. C. Sturrock, South African Minister of Transport, recently told the House of Assembly that South Africa did not expect to monopolise all the air routes in Africa; South Africa's neighbours and the U.S.A. expected to operate air lines there. South African Airways would not have a monopoly in the Union, but he thought that the House would agree that there should be some control. The South African view had always been that the only satisfactory way to control aviation was by multilateral agreement and an international air authority. Unfortunately, this was not agreed to at the Chicago air conference.

Fourth Bridge Railway Company.—The net revenue for the year 1944 after giving effect to the estimated operation of the financial arrangements under the control agreement with the Government was £122,357, compared with £121,933 for the previous year. After paying interest of £28,933 on the 4 per cent. debenture stock and a dividend at the rate of 4 per cent. (same) on the ordinary stock, there remains £424 due to the London & North Eastern Railway Company. The balance sheet shows that the amount which has been paid to the trust account in respect of arrears of maintenance in terms of the control agreement was £11,573, which compares with £11,345 a year earlier.

York Station Gifts Endow Hospital Bed.—When, early in 1944, Mr. C. M. Jenkin Jones, the Divisional General Manager (N.E. Area), L.N.E.R., handed to Mr. W. L. Lawton, Chairman & Treasurer of the York County Hospital, a cheque for 325 guineas, representing the collection at the 1943 Christmas tree at York Station, he expressed the hope that by the end of 1945 the amount would be made up to the £1,000 necessary for the permanent endowment of a bed at the County Hospital. So generous was the response to the collectors at the 1944 Christmas tree, however, that Mr. Jenkin Jones was able recently to hand over a cheque for the balance, and thus complete in two years, instead of three, the sum necessary for the endowment of the bed.

West Yorkshire Road Car Co. Ltd.—This company is controlled jointly by the L.N.E.R. and L.M.S.R. Companies and by Tilling Motor Services Limited. In the year 1944 traffic receipts and other income,

less operating, management, and general expenses amounted to £494,531 (£485,747). Fuel taxation and vehicle licences took £53,906 (£51,217), provision for deferred maintenance nil (£6,500), provision for income tax and E.P.T. £287,606 (£272,074), directors' fees were £2,100 (same), transfer to depreciation reserve was nil (£31,112), and £50,000 (£25,000) was put to reserve for contingencies. Net profit was £100,919

British and Irish Railway Stocks and Shares

Stocks	Highest 1944	Lowest 1944	Prices	
			Mar. 13, 1945	Rise/ Fall
G.W.R.				
Cons. Ord.	62½	55	58½	—
5% Con. Pref.	122½	114½	118½	— 1
5% Red. Pref. (1950) ..	110½	104	105	—
5% R. Charge	135½	128	134½	—
5% Cons. Guar.	134½	125	132½	—
4% Deb.	118½	114	116½	—
4½% Deb.	118½	112	118½	—
4½% Deb.	124½	119½	122½	—
5% Deb.	137	129½	136½	—
2½% Deb.	77	73½	75½	—
L.M.S.R.				
Ord.	34½	27½	29	— ½
4% Pref. (1923)	64½	55½	58½	— 1
4% Pref.	81	72½	76½	— ½
5% Red. Pref. (1955) ..	105½	102	104	—
4% Guar.	107½	99½	103	— 1
4% Deb.	111½	104	108	—
5% Red. Deb. (1952) ..	111	108	108½	—
L.N.E.R.				
5% Pref. Ord.	10½	7½	7½	— ½
4% Def. Ord.	5½	3½	3½	— ½
4% First Pref.	68½	55½	56½	— 1
4% Second Pref.	35½	28½	30½	— ½
5% Red. Pref. (1955) ..	102½	97½	101	—
4% First Guar.	105½	96½	101	— 1
4% Second Guar.	95½	88½	95	—
3% Deb.	88½	80½	86	—
4% Deb.	110½	103½	106½	— ½
5% Red. Deb. (1947) ..	105½	101½	102½	—
4½% Sinking Fund Red. Deb.	107	104½	104½	—
SOUTHERN				
Pref. Ord.	80½	71½	77	— ½
Def. Ord.	26½	23	24½	— ½
5% Pref.	122	113½	118½	— 1
5% Red. Pref. (1964) ..	117½	112½	115½	—
5% Guar. Pref.	134	125½	132½	—
5% Red. Guar. Pref. (1957)	115½	112½	114½	—
4% Deb.	118	110	115½	—
5% Deb.	135½	127	135	—
4% Red. Deb. (1962- 67)	111½	107½	109½	— 1
4% Red. Deb. (1970- 80)	112	108½	110½	—
FORTH BRIDGE				
4% Deb.	107	103	105	—
4% Guar.	106½	102	105	—
L.P.T.B.				
4½% "A"	125	119	122½	—
5% "A"	133½	128	132½	—
3% Guar. (1967-72) ..	99½	98	99	—
5% "B"	124½	118½	123½	—
5% "C"	72½	64½	66½	—
MERSEY				
Ord.	35½	33	36	+ ½
3% Perp. Pref.	72	66	70	—
4% Perp. Deb.	105	103	106	—
3% Perp. Deb.	85½	79½	84	—
IRELAND*				
BELFAST & C.D.				
Ord.	9	6	6½	—
G. NORTHERN				
Ord.	33½	19	27½	—
Pref.	49	37	43½	— ½
Guar.	70	57½	69	—
Deb.	90½	81½	92	—
IRISH TRANSPORT				
Common	—	—	70	— 2½
3% Deb.	—	—	99	—

* Latest available quotation

OFFICIAL NOTICES

OFFICIAL ADVERTISEMENTS

OFFICIAL ADVERTISEMENTS intended for insertion on this page should be sent in as early in the week as possible. The latest time for receiving official advertisements for this page for the current week's issue is 9.30 a.m. on the preceding Monday. All advertisements should be addressed to:—*The Railway Gazette*, 33, Tothill Street, Westminster, London, S.W.1.

TECHNICAL INSTRUCTOR—Rail carriage, coach building wishes contact firm with vocational training scheme.—Box 13 c/o *The Railway Gazette*, 33, Tothill Street, Westminster, London, S.W.1.

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(£97,394), and adding £37,080 brought forward makes a total of £138,000. Dividend on the ordinary shares is again 10 per cent., tax free, absorbing £78,750, and the balance carried forward is £46,250.

Nigerian Railway.—Nigerian Railway traffic returns for the period December 2-30, 1944, totalled £538,346, a decrease of £15,725, compared with the similar period of 1943.

Railway Engineering Research.—A paper on railway engineering research by Mr. F. C. Johansen, M.Sc. (Eng.), was read on March 13, before the Institution of Engineers & Shipbuilders in Scotland.

Bermuda Railways Investment Co. Ltd.—The Bermuda Railways Investment Co. Ltd., which owns practically the whole of the issued capital (£435,000) of the Bermuda Railway Co. Ltd., has been granted exemption from import duties and certain assessments until December 31, 1945.

Bengal & North Western Railway Co. Ltd.—Negotiations relative to the Bengal & North Western Railway Co. Ltd. (in voluntary liquidation) with the Secretary of State for India have reached a stage where proposals can be placed before the stockholders. A statement and notice calling a general meeting will be issued early in April.

Inland Transport.—The Chairman of the British Road Federation, Mr. G. N. Wilson, recently stated that the complexity of the country's inland transport system made it impossible for any sectional body to view the whole question in its true perspective. Mr. Wilson suggested a Government inquiry on transport matters, similar to that held by the Inter-regional Highways Committee in the United States.

Isle of Man Railway Company.—The accounts of the Isle of Man Railway Company for the year to December 31, 1944, show gross revenue receipts of £84,500 (£79,718), and expenses of £64,101 (£59,532), leaving a profit on working of £20,399 (£20,186). A dividend has been recommended of 5 per cent. on the preference share capital and of 2½ per cent. on the paid-up ordinary share capital, leaving a balance of £1,928 to be carried forward.

Air Services for U.S. Season-Ticket Holders.—A company called Air Commuting Incorporated has been formed in New York for supplying daily air services for "commuters," or season ticket holders, between 31 surrounding residential communities and New York City. The application to the United States Civil Aeronautics Board for certificates authorising the establishment of the service claims that it would "meet the vital needs of many thousands of persons for greater travelling speed in their daily commutation." The company is seeking authority to carry goods and mail as well as passengers, and to serve all important outer suburbs of New York in Westchester County, Connecticut, Long Island, and New Jersey. The longest route proposed is from Southampton, Long Island, 92 miles; others would run from Riverhead,

76 miles, and Patchogue, 55 miles, both in Long Island; Asbury Park and Long Branch, New Jersey, 56 and 52 miles respectively; and Norwalk, Connecticut, 47 miles. Connecting services are proposed between Westchester, La Guardia, and Newark airports.

Mexican Government and Negotiations for Purchase of British-Owned Railway.—*The Financial News* stated on March 6 that it had been informed by the Mexican Railway Co. Ltd. that negotiations for the purchase of the company's undertaking by the Mexican Government had been in progress for some time, but had not yet reached a stage at which any statement could be made. Messages from America, it was added, had reported that the Mexican Government had offered the equivalent of £2,400,000 for the undertaking, although a figure of £3,000,000 had been mentioned as the aim of the vendor.

Standardisation and Efficient Production.—Speaking at the luncheon of the British Standards Institution held on March 6, Lord Woolton, the President, referring to the establishment of the Institution in 1901 by the engineering industry, said that no one could question that in recognising the value of standardisation the British engineering industry had been able to lead the world in the production of munitions. Standardisation was one of the basic principles of efficient production: it ensured the maximum value a unit of price; it gave the consumer protection by guaranteeing a standard of quality or performance. He felt it was necessary to see that the public was aware that goods made to a British Standard meant value for money. In war we had seen the advantages of standards: let us apply the lesson we had learnt from war to the needs of peace. He looked forward to the time when the common law caveat "let the buyer beware" no longer applied. The world, at the present time, was bare of goods; it was going to be a sellers' market, and he hoped that British industries would maintain their high standard.

Twenty-five Years of Public Service.—Last year, Ribbles Motor Services Limited, which is now among the largest and most important passenger road transport associates of the L.M.S.R. and also a member of the B.E.T. Group, completed a quarter of a century of public service. We noted the event at the time, and journals devoted more particularly to road transport interests marked the occasion by comprehensive articles. Noteworthy among these was an historical review by Mr. H. Bottomley, Acting General Manager of the company, which was published in *Bus & Coach*. This was subsequently reproduced in attractive brochure form and copies were distributed to every employee now in the company's service. The rigidity of Paper Control prevented a sufficiently large quantity being printed to meet requirements, and Mr. Bottomley informs us that he would like to have sent a copy to every one of the company's staff who has joined H.M. Forces, but unfortunately this cannot be done.

Those who have been fortunate enough to obtain a copy of this brochure will doubtless preserve it as an interesting and valuable record; the supply is now entirely exhausted.

Awards to Southern Railway Staff.—On March 12, at Charing Cross Hotel, Southern Railway awards in recognition of gallantry and devotion to duty were presented to members of the company's staff by Colonel Eric Gore Browne, the Chairman. The recipients were Guard W. Ward, Reading (who also receives the B.E.M.); Fireman D. Humphrey, Stewarts Lane (who also receives a national Commendation); and Dock Loader W. J. Wilkes, Newhaven, Dock Checker G. F. Martin, Newhaven, Police-Constable T. H. Raisson, Victoria, Rigger H. E. Roberts, Southampton Docks, Ganger T. Coleman, Bosham, and Guard A. G. Mathews, Wimbledon. The last-named was presented with a watch which was the property of the late Mr. T. S. Boswell, for 30 years Civil Engineer for the Southern Railway of the U.S.A. The gift from the donor, Miss Martha Gash Boswell, who desired the watch to be given to a Southern Railway man who had need of it, was made possible through the English-Speaking Union in New York and in London. Among Southern Railway officers present at the ceremony were:—

Sir Eustace Missenden, General Manager; and Messrs. S. E. Clark, Acting Secretary; O. Cromwell, Chief Officer for Labour & Establishment; F. Gilbert, Deputy Chief Officer for Labour & Establishment; E. Uzzell, Welfare Officer; R. M. T. Richards, Traffic Manager; W. J. England, Superintendent of Operation; C. F. de Pury, London West Divisional Superintendent; V. A. M. Robertson, Chief Civil Engineer; E. A. W. Turbett, Assistant Chief Mechanical Engineer; T. E. Chrimes, Superintendent of Motive Power; D. Sheppy, Eastern Divisional Superintendent of Motive Power; R. J. Cardy, Divisional Marine Manager, Newhaven; and Lt.-Colonel H. C. Prescott, Chief of Police.

Contracts and Tenders

Specialoid Limited announces that Mr. T. Bimson has been appointed Area Manager, in charge of its Leeds Branch and responsible for the company's replacement business throughout Yorkshire, Durham and Northumberland; and that Mr. J. Thompson, formerly Area Engineer for the company in that area, has been appointed Manager of the Piston Department of the Aero Piston Ring Co. Ltd., Leeds, main concessionaire for Specialoid pistons.

Below is a list of orders placed recently by the Egyptian State Railways:—

Easterbrook Allcard & Co. Ltd.: Engineers' hand dies.

Pinchin Johnson & Co. Ltd.: Paints.

George Slater Limited: Springs.

Samuel Fox & Co. Ltd.: Steel bars.

Marconi's Wireless Telegraph Co. Ltd.: Fan and motor.

Railway Stock Market

Stock markets have been steady although still showing only moderate activity; the prevailing tendency has been to await the war news. British Funds continued firm, but there was some slackening of interest in industrials, and home rails eased because of inactive conditions. On the other hand, speculative activity increased in European bonds, and Argentine rails claimed more attention on post-war hopes, showing general improvement with gains of up to 1½ points in debentures on moderate demand which found the stocks still only in small supply. French railway sterling bonds were again a good feature, reflecting the war news and hopes that interest payments may be resumed before long. Mexican Railway issues were again higher on the negotiations with the Mexican Government for purchase of the undertaking.

Sentiment as to home rails was affected to some extent by the view that, now the meetings have been held, there is unlikely to be any new factors for the time being which will enable further light to be thrown on post-war hopes and fears. The meetings, however, have emphasised that, given equality of treatment with other forms of transport, the position and earning power of the railways should be placed on a favourable basis after the war. In due course it can be expected that the White Paper giving results of railway working during 1944 will be published. This is likely to show

aggregate earnings below the high record of the previous year; but the figures will again serve to emphasise the vital war-time services performed by the railways, and the large profit the Government is making out of the control agreement, the return to the railways and their stockholders, being limited by the fixed rental. The control agreement, of course, will have to be judged by the results over the full period during which it is in operation; and it is being confidently assumed it can be taken for granted that stockholders are virtually assured of dividends at around current rates for at least the next two years. Scheduled to run until at least one year after the end of the war, it is generally assumed that the fixed rental will in fact remain in force until there is final agreement on post-war organisation and control of transport.

Great Western failed to hold an earlier gain and at 58½ was the same as a week ago, and the 5 per cent. preference eased to 118½, and the guaranteed stock at 132½ was also fractionally lower; but the 4 per cent. debentures remained at 116½. L.M.S.R. lost last week's rally, receding from 30½ to 29½, with the senior preference a point down at 77, and the 1923 preference ½ easier at 59.

L.N.E.R. second preference, yielding as much as 9 per cent., was 30½, compared with 30½ a week ago, the first preference 57½, compared with 57½; and the first guaranteed was ½ down at 101½, although the second guaranteed kept at 95.

Southern deferred reacted from 25½ to 24½ and the preferred from 77½ to 76½; the 5 per cent. preference eased slightly to 118½, although the 4 per cent. debentures remained at 115½. London Transport "C" was 66, compared with 66½ a week ago. The prevailing view is that home railway junior stocks probably offer little scope for improvement in prices until markets generally become active, although the yields must be regarded as more than discounting the uncertainties of the position when the control agreement is terminated. There is, of course, no reason to assume that the railways will be treated unfairly in the final post-war settlement. Apart from the latter, however, earnings naturally will turn on the speed and extent of the post-war industrial revival.

Argentine rails have recorded general improvement. Buenos Ayres Great Southern was 11½, compared with 11 a week ago, the 5 per cent. preference 25½, compared with 24½, and the 4 per cent. debentures have been maintained at 62½. Buenos Ayres Western 4 per cent. debentures improved at 55, Central Argentine 5 per cent. debentures were 62½, and Buenos Ayres & Pacific consolidated debentures were marked up to 55. Elsewhere, San Paulo eased to 55½. United of Havana 1906 debentures have been dull at 25½, awaiting the expected capital scheme.

Canadian Pacific receded further to 15, reflecting the reaction in dollar stocks. Among French rails, Nord's have advanced from 100½ to 104½ and Midi & Orleans from 84½ to 90.

Traffic Table and Stock Prices of Overseas and Foreign Railways

Railways	Miles open	Week ended	Traffic for week		No. of Weeks	Aggregate traffic to date			Shares or Stock	Prices						
			Total this year	Inc. or dec. compared with 1942/3		Totals		Increase or decrease		Highest 1944	Lowest 1944	March 13, 1945	Yield % (Notes)			
						1943/4	1942/3									
South & Central America	Antofagasta (Chili) & Bolivia	834	4.3.45	£ 31,680	+	£ 3,920	9	280,700	£ 267,900	+	£ 12,800	Ord. Sk.	13½	9½	10	Nil
	Argentine North Eastern	753	3.3.45	20,080	+	4,120	35	692,873	568,273	+	124,600	Ord. Sk.	6½	4½	7	Nil
	Bolivar	174	Feb., 1945	4,995	—	263	8	—	—	—	—	6 p.c. Deb.	18½	7½	7½	Nil
	Brazil	—	—	—	—	—	—	—	—	—	—	Bonds	19½	15	21½	Nil
	Buenos Ayres & Pacific	2,773	3.3.45	171,600	+	31,534	35	4,921,934	4,045,600	+	876,334	Ord. Sk.	7½	3	6	Nil
	Buenos Ayres Great Southern	5,080	3.3.45	279,466	+	33,000	35	7,674,666	7,037,733	+	636,933	Ord. Sk.	14½	9½	11½	Nil
	Buenos Ayres Western	1,924	3.3.45	70,200	+	3,800	35	2,634,466	2,182,200	+	456,066	Ord. Sk.	13½	9½	10½	Nil
	Central Argentine	3,700	3.3.45	213,733	+	15,267	35	6,744,050	5,853,240	+	890,810	Ord. Sk.	10½	6½	8½	Nil
	Do.	—	—	—	—	—	—	—	—	—	—	Dfd.	4½	3	4½	Nil
	Cent. Uruguay of M. Video	972	3.3.45	34,855	+	3,966	35	1,183,744	1,209,285	—	25,541	Ord. Sk.	5½	4	4½	Nil
	Costa Rica	262	Jan., 1945	25,556	+	2,891	30	146,887	152,859	—	5,972	Ord. Sk.	17½	14½	16	Nil
	Dorada	70	Jan., 1945	31,928	+	5,908	1	31,928	26,020	+	5,908	1 Mt. Deb.	101	101	98½	£6 1/10
	Entre Rios	808	3.3.45	26,800	+	5,347	35	925,093	785,900	+	139,193	Ord. Sk.	6½	4½	5½	Nil
	Great Western of Brazil	1,030	3.3.45	27,800	+	2,800	9	251,900	218,000	+	33,900	Ord. Sh.	38/-	23/3	26/3	Nil
	International of Cl. Amer.	794	Jan., 1945	\$185,167	—	\$25,877	1	\$185,167	\$211,044	—	\$25,877	—	—	—	—	—
	Interoceanic of Mexico	22½	Feb., 1945	5,023	—	2,592	8	10,517	14,255	—	3,738	5 p.c. Deb.	88	79	78½	£6 7/5
	La Guaira & Caracas	1,918	3.3.45	46,601	+	5,743	9	409,246	389,120	+	20,126	Ord. Sk.	5½	4½	4	Nil
	Leopoldina	483	7.3.45	509,900	+	101,200	10	5,582,500	3,848,400	+	1,684,100	Ord. Sk.	½	½	1	Nil
	Mexican	319	Dec., 1944	15,817	—	3,197	26	99,688	103,465	—	3,777	—	—	—	—	—
	Midland Uruguay	382	28.2.45	5,133	—	6,107	8	22,202	38,370	—	16,168	Ord. Sh.	75/10	65/10	71/3	£3 10/2
Nitrate	274	2.3.45	£55,204	+	£5,276	35	£2,065,516	£1,795,795	+	£269,721	Pr. Li. Sk.	79½	68	77½	£7 14/9	
Paraguay Central	1,059	Jan., 1945	145,653	+	34,209	30	914,951	748,631	+	166,320	Pref.	9	10	9½	Nil	
Peruvian Corporation	100	Jan., 1945	c 193,000	—	—	30	c 751,000	c 796,000	—	c 45,000	—	—	—	—	—	
Salvador	153½	—	2,085	—	2,475	34	20,045	45,270	—	25,225	Ord. Sk.	57½	46	55	£3 12/9	
San Paulo	156	Feb., 1945	75,273	—	6,163	35	1,788,694	1,817,301	—	28,607	Ord. Sh.	21/3	13/9	12/6	Nil	
Taitai	1,301	3.3.45	1,568	—	17	26	8,892	8,716	+	176	Ord. Sk.	—	—	—	—	
United of Havana	73	Dec., 1944	—	—	—	—	—	—	—	—	—	—	—	—	—	
Uruguay Northern	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Canada	Canadian Pacific	17,028	7.3.45	1,115,200	—	29,600	9	10,565,000	10,690,400	—	125,400	Ord. Sk.	17½	13½	15½	£34/6
	Barsi Light	202	Feb., 1945	20,220	—	4,467	44	243,080	237,600	+	5,480	Ord. Sk.	129½	97½	127½	£3 10/7
Various	Egyptian Delta	607	31.1.45	22,886	+	296	44	592,927	501,501	+	91,426	Pr. Sh.	7½	5½	7	Nil
	Manila	—	—	—	—	—	—	—	—	—	—	B. Deb.	63½	58	62½	Nil
	Midland of W. Australia	277	Jan., 1945	19,645	—	7,632	31	139,946	223,920	—	83,974	Inc. Deb.	101½	99½	96½	£42/11
	Nigeria	1,900	25.11.44	374,576	—	59,634	4	—	—	—	—	—	—	—	—	—
	South Africa	13,301	3.2.45	1,042,633	+	135,843	44	40,796,736	36,963,117	+	3,833,619	—	—	—	—	—
Various	Various	4,774	April, 1944	1,188,999	—	212,162	—	—	—	—	—	—	—	—	—	

Note. Yields are based on the approximate current price and are within a fraction of ½. Argentine traffic is given in sterling calculated @ 15 pesos to the £
 † Receipts are calculated @ 1s. 6d. to the rupee